

AB The invention relates to hair dye kits containing 2-component hair-dye **compsns.** (A1 and A2) and a reductive decolorizing agent; upon usage A1 and A2 are mixed. The component A2 comprises at least 1 carbonyl compound, and component A1 comprises at least 1 indoline derivative (I), or 1 3H-indolium derivative (II), R groups and A- are defined. Thus, the component A1 contained (g): 1,2,3,3,5-pentamethyl-3H-indolium iodide 0.30; lauryl ether sulfate (28% aqueous solution) 1, ethanol 2, water to 10%. The component A2 included (g): 3,5-dimethoxy-4-hydroxybenzaldehyde 0.17, lauryl ether sulfate (28% aqueous solution) 1, ethanol 2, water to 10%. By mixing 1 g of each

component a pH of 8.1 was obtained. The dye was applied to bleached hair.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 90-02-8, 2-Hydroxybenzaldehyde, biological studies 2233-18-3,
3,5-Dimethyl-4-hydroxybenzaldehyde 7770-45-8, 4-Hydroxy-1-naphthaldehyde
15971-29-6, 4-Methoxy-1-naphthaldehyde 18278-34-7, 4-Hydroxy-2-
methoxybenzaldehyde **84562-48-1**, 4-Dimethylamino-2-
methoxybenzaldehyde

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(decolorizing agent; **hair** dye kits comprising
indoline/indolium derivs. and carbonyl compds. and decolorizing agent)

IT 58-27-5, 2-Methyl-1,4-naphthoquinone 86-51-1, 2,3-Dimethoxybenzaldehyde
93-02-7, 2,5-Dimethoxybenzaldehyde 95-01-2, 2,4-Dihydroxybenzaldehyde
98-03-3, 2-Thiophenecarboxaldehyde 99-61-6, 3-Nitrobenzaldehyde
100-10-7, 4-Dimethylaminobenzaldehyde 120-14-9,
3,4-Dimethoxybenzaldehyde 121-32-4, 3-Ethoxy-4-hydroxybenzaldehyde
121-33-5, Vanillin 123-08-0, 4-Hydroxybenzaldehyde 134-96-3,
3,5-Dimethoxy-4-hydroxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde
148-53-8, 2-Hydroxy-3-methoxybenzaldehyde 458-36-6 487-70-7,
2,4,6-Trihydroxybenzaldehyde **487-89-8**, Indole-3-carbaldehyde
496-15-1D, Indoline, derivs. 498-62-4, 3-Thiophenecarboxaldehyde
552-89-6, 2-Nitrobenzaldehyde 555-16-8, 4-Nitrobenzaldehyde, biological
studies 613-45-6, 2,4-Dimethoxybenzaldehyde 619-66-9,
4-Carboxybenzaldehyde 620-02-0, 5-Methylfurfural 621-59-0, Isovanillin
623-27-8, Benzene-1,4-dicarbaldehyde 643-79-8, o-Phthaldialdehyde
932-41-2, 2,3-Thiophenedicarboxaldehyde 932-95-6, 2,5-
Thiophenedicarboxaldehyde 1003-29-8, Pyrrol-2-aldehyde 1192-58-1,
N-Methylpyrrol-2-aldehyde 1194-98-5, 2,5-Dihydroxybenzaldehyde
1971-81-9, 4-Dimethylamino-1-naphthaldehyde 2144-08-3,
2,3,4-Trihydroxybenzaldehyde 4771-49-7, 6-Methylindole-3-carboxaldehyde
5392-12-1, 2-Methoxy-1-naphthaldehyde **6203-18-5** 6872-05-5,
5-Amino-1,3,3-trimethyl-2-methylene-indoline 7311-34-4,
3,5-Dimethoxybenzaldehyde **7570-45-8** 7757-83-7, Sodium sulfite
10031-82-0, 4-Ethoxybenzaldehyde 10196-04-0, Ammonium sulfite
13677-79-7, 3,4,5-Trihydroxybenzaldehyde 17422-74-1,

Chromone-3-carboxaldehyde 17754-90-4, 4-Diethylamino-2-hydroxybenzaldehyde 27344-28-1 29865-90-5, 3,4-Dimethoxy-5-hydroxybenzaldehyde 35976-46-6, 5-Methoxy-1,3,3-trimethyl-2-methylene-indoline 36429-28-4 39578-87-5, 1,3,3,5-Tetramethyl-2-methylene-indoline 41382-29-0 42059-81-4 54849-44-4 68282-53-1, 4-Methyl-5-imidazole-carboxaldehyde 87345-53-7 **90134-10-4**, 4-Dibutylamino-benzaldehyde 99567-90-5 100980-82-3 106001-58-5, 4-Diethylamino-3-methoxybenzaldehyde 116209-27-9, 3-Methoxy-4-(1-pyrrolidinyl)benzaldehyde 120420-70-4 126526-42-9 134822-76-7 151249-39-7 187030-52-0, 5-[4-(Diethylamino)phenyl]-2,4-pentadienal 189685-50-5 357397-32-1 357397-33-2 357397-34-3 357397-35-4 357397-36-5 357397-37-6 357397-38-7 357397-39-8 357397-41-2 357397-42-3 357397-43-4 357397-44-5 357397-45-6 357397-46-7 357397-47-8 357397-48-9 357397-49-0

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye kits comprising indoline/indolium derivs. and carbonyl compds. and decolorizing agent)

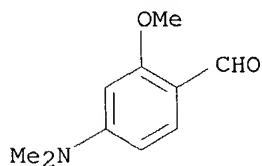
IT **84562-48-1**, 4-Dimethylamino-2-methoxybenzaldehyde

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(decolorizing agent; hair dye kits comprising indoline/indolium derivs. and carbonyl compds. and decolorizing agent)

RN 84562-48-1 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



IT **100-10-7**, 4-Dimethylaminobenzaldehyde **487-89-8**, Indole-3-carbaldehyde **1971-81-9**, 4-Dimethylamino-1-naphthaldehyde **6203-18-5** **7570-45-8** **90134-10-4**

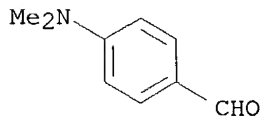
, 4-Dibutylamino-benzaldehyde

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye kits comprising indoline/indolium derivs. and carbonyl compds. and decolorizing agent)

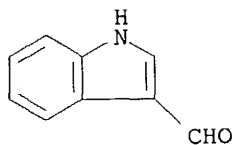
RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)

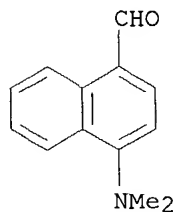


RN 487-89-8 HCAPLUS

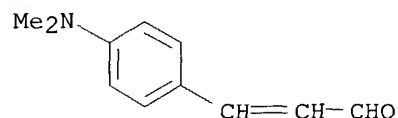
CN 1H-Indole-3-carboxaldehyde (9CI) (CA INDEX NAME)



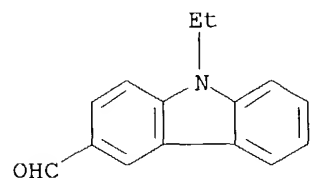
RN 1971-81-9 HCAPLUS
CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



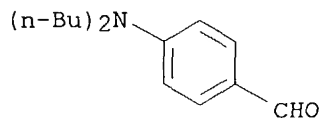
RN 6203-18-5 HCAPLUS
CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 7570-45-8 HCAPLUS
CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



RN 90134-10-4 HCAPLUS
CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)



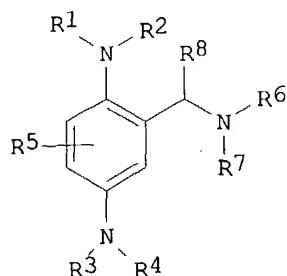
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 20 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

AN 2001:524685 HCAPLUS
 DN 135:111699
 TI Hair dyes containing 2-aminoalkyl-1,4-diaminobenzene derivatives
 IN Chassot, Laurent; Baun, Hans-Jurgen
 PA Wella Aktiengesellschaft, Germany
 SO Eur. Pat. Appl., 31 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1116711	A2	20010718	EP 2000-115071	20000727
	EP 1116711	A3	20010926		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001199941	A2	20010724	JP 2000-364297	20001130
	BR 2000006380	A	20010717	BR 2000-6380	20001218
PRAI	DE 1999-19961272	A	19991218		
OS	MARPAT 135:111699				
GI					



AB The invention concerns oxidative hair dyes that contain as developers 2-aminoalkyl-1,4-diaminobenzene derivs. or their physiol. compatible water soluble salts of the formula (I), where R1-R7 are defined. The hair dye **comps.** further contain another developer, e.g. 1,4-diaminobenzene, 2,5-diaminotoluene; coupling agents, e.g. 2,6-diaminopyridine; and at least one direct dye. Thus, bromo-p-phenylenediamine-HCl was converted with di-tert-Bu dicarbonate to 2,5-bis(tert-butoxycarbonylamino)bromobenzene, and then with DMF in the presence of methyllithium and butyllithium to (2-formyl-1,4-phenylene)biscarbamic acid di(tert-butyl)ester. This compound was reacted with ethylamine and the hydrochloride of the formed substance was prepared. The obtained 2-ethylaminomethyl-1,4-diamino benzene hydrochloride was used (0.0125 mmol) in a hair dye, that further contained: 1,3-dihydroxybenzene (coupling agent) 0.0125 mmol; potassium oleate (8% aqueous solution) 0.01 g; ammonia (22% aqueous solution) 0.01 g; ethanol 0.01 g; ascorbic acid 0.003 g; water to 1 g. The dye resulted a light blond color.

IC ICM C07C211-51
 ICS A61K007-13; C07D215-38; C07D307-52; C07D295-12; C07D241-04;
 C07D307-12; C07C233-36; C07C239-20; C07C215-14; C07C217-08;
 C07C215-76

CC 62-3 (Essential Oils and Cosmetics)
 IT 59-51-8, Methionine 62-53-3, Aniline, reactions 75-04-7, Ethylamine,

reactions 75-31-0, Isopropylamine, reactions 95-85-2,
 4-Chloro-2-aminophenol 97-51-8, 2-Hydroxy-5-nitrobenzaldehyde 98-03-3,
 Thiophene-2-carbaldehyde 99-57-0, 2-Amino-4-nitrophenol 99-98-9,
 4-Amino-N,N-dimethylaniline 100-52-7, Benzaldehyde, reactions
 104-86-9, 4-Chlorobenzylamine 106-47-8, 4-Chloroaniline, reactions
 106-49-0, 4-Methylaniline, reactions 107-10-8, Propylamine, reactions
 107-11-9, Allylamine 108-00-9, 2-Dimethylamino ethylamine 109-01-3
 109-55-7, 3-Dimethylamino propylamine 109-83-1, 2-Methylamino ethanol
 109-85-3, 2-Methoxy ethylamine 110-58-7, Pentylamine 110-73-6,
 2-Ethylamino-ethanol 110-91-8, Morpholine, reactions 111-42-2,
 Diethanolamine, reactions 120-57-0, 3,4-Methylenedioxybenzaldehyde
 123-08-0, 4-Hydroxybenzaldehyde 123-72-8, Butyraldehyde 123-75-1,
 Pyrrolidine, reactions 364-73-8, Benzene, 4-bromo-1-fluoro-2-nitro-
 364-74-9, 1,4-Difluoro-2-nitrobenzene 364-76-1 437-83-2,
 3-Fluoro-2-methoxy aniline 446-35-5, 1,3-Difluoro-4-nitrobenzene
 455-14-1, 4-Trifluoromethyl aniline 498-63-5, Prolinol 500-22-1,
 Pyridine-3-carbaldehyde 536-21-0, 1-(3-Hydroxyphenyl)-2-aminoethanol
 536-90-3, 3-Methoxyaniline 555-16-8, 4-Nitrobenzaldehyde, reactions
579-72-6, 2-Dimethylaminobenzaldehyde 587-04-2,
 3-Chlorobenzaldehyde 590-86-3, 3-Methylbutyraldehyde 609-36-9, Proline
 616-30-8, 3-Amino-1,2-propane diol 617-45-8, Aspartic acid 617-89-0,
 Furfurylamine 765-30-0, Cyclopropylamine 872-85-5,
 Pyridine-4-carbaldehyde 1117-97-1, O,N-Dimethyl-hydroxylamine
 1121-60-4, 2-Pyridinecarboxaldehyde 1493-27-2, 1-Fluoro-2-nitrobenzene
 2038-03-1, 4-Morpholineethanamine 2043-61-0, Cyclohexane carbaldehyde
 2454-37-7, 3-(1-Hydroxyethyl)-aniline 2516-47-4, Aminomethyl
 cyclopropane 2812-47-7, Prolinamide 2835-95-2, 3-Amino-6-methylphenol
 3731-51-9, 2-Picolylamine 3731-53-1, 4-Picolylamine 4214-76-0,
 2-Amino-5-nitropyridine 4795-29-3, Tetrahydrofurfurylamine 5036-48-6,
 1-(3-Aminopropyl)imidazole 5382-16-1, 4-Hydroxypiperidine 5616-32-0,
 Methylaminoacetonitrile 6168-72-5, 2-Aminopropanol 6291-85-6,
 3-Ethoxypropylamine 6315-89-5, 3,4-Dimethoxy aniline 6859-99-0,
 3-Hydroxypiperidine 6921-22-8 7304-32-7, 2-Fluoro-5-nitro benzoic acid
 7663-77-6, 1-(3-Aminopropyl)-2-pyrrolidone 13325-10-5, 4-Aminobutanol
 14268-66-7, 3,4-Methylene dioxylaniline 24424-99-5, Di-tert-butyl
 dicarbonate 25739-59-7 35303-76-5, 4-(2-Aminoethyl)-benzenesulfonamide
 40499-83-0, 3-Hydroxypyrrolidine **51980-54-2**, 4-Pyrrolidino
 benzaldehyde 68621-88-5 71026-66-9 244104-66-3 325953-40-0
 325953-41-1 325953-45-5 325953-46-6 325953-48-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(hair dyes containing 2-aminoalkyl-1,4-diaminobenzene derivs.)

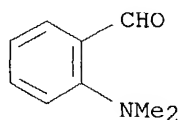
IT **579-72-6**, 2-Dimethylaminobenzaldehyde **51980-54-2**,
 4-Pyrrolidino benzaldehyde

RL: RCT (Reactant); RACT (Reactant or reagent)

(hair dyes containing 2-aminoalkyl-1,4-diaminobenzene derivs.)

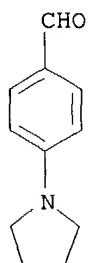
RN 579-72-6 HCAPLUS

CN Benzaldehyde, 2-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 51980-54-2 HCAPLUS

CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



L69 ANSWER 21 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:300470 HCAPLUS

DN 134:315876

TI **Hair dye compositions containing aromatic aldehydes and quinolinium derivative**

IN Javet, Manuela; Mueller, Catherine

PA Wella Aktiengesellschaft, Germany

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001028507	A1	20010426	WO 2000-EP10049	20001012
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
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	DE 19950404	A1	20010523	DE 1999-19950404	19991020
	EP 1143923	A1	20011017	EP 2000-971366	20001012
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI, LT, LV, FI, RO		
	US 6485529	B1	20021126	US 2001-868551	20010619
PRAI	DE 1999-19950404	A	19991020		
	WO 2000-EP10049	W	20001012		
OS	MARPAT 134:315876				
AB	A composition for coloring hair fibers contains at least 1 aromatic aldehyde compound, at least 1 quinolinium derivative in addition to an alkanolamine. The invention also relates to a method for coloring fibers using the composition and to a multi-component kit for coloring and subsequently removing the color from fibers. Thus, a hair dye formulation contained 1-Ethyl-2-methylquinolinium chloride 3.45, 4-hydroxy-3-methoxybenzaldehyde 1.76, 6-O-palmitoyl-L-ascorbic acid 0.30, cetylstearyl alc. 12.00, 28% aqueous solution of lauryl ether sulfate 10.00, EtOH 23.0, and water to 100.0 g.				
IC	ICM A61K007-13				
	ICS D06M013-35				
CC	62-3 (Essential Oils and Cosmetics)				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

ST hair dye arom aldehyde quinolinium
 IT Alcohols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (amino; hair dye compns. containing aromatic
 aldehydes and quinolinium derivative)

IT Aldehydes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (aromatic; hair dye compns. containing
 aromatic aldehydes and quinolinium derivative)

IT Hair preparations
 (dyes; hair dye compns. containing aromatic
 aldehydes and quinolinium derivative)

IT 58-27-5, 2-Methyl-1,4-naphthoquinone 86-51-1, 2,3-
 Dimethoxybenzaldehyde 90-02-8, 2-Hydroxybenzaldehyde, biological
 studies 93-02-7, 2,5-Dimethoxybenzaldehyde 95-01-2, 2,4-
 Dihydroxybenzaldehyde 99-61-6, 3-Nitrobenzaldehyde
 100-10-7, 4-Dimethylaminobenzaldehyde 120-14-9, 3,4-
 Dimethoxybenzaldehyde 121-32-4, 3-Ethoxy-4-
 hydroxybenzaldehyde 121-33-5, Vanillin 123-08-0, 4-
 Hydroxybenzaldehyde 134-96-3, 3,5-Dimethoxy-4-
 hydroxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde
 141-43-5, Monoethanolamine, biological studies 148-53-8, 2-Hydroxy-3-
 methoxybenzaldehyde 458-36-6, 4-Hydroxy-3-
 methoxycinnamaldehyde 487-70-7, 2,4,6-
 Trihydroxybenzaldehyde 552-89-6, 2-Nitrobenzaldehyde
 555-16-8, 4-Nitrobenzaldehyde, biological studies 605-59-4, 1-Ethyl-4-
 methylquinolinium iodide 606-55-3, 1-Ethyl-2-
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 Dimethoxybenzaldehyde 619-66-9, 4-Carboxybenzaldehyde
 621-59-0, Isovanillin 623-27-8, Benzene-1,4-dicarboxaldehyde
 643-79-8, Phthalaldehyde 1194-98-5, 2,5-
 Dihydroxybenzaldehyde 1971-81-9, 4-Dimethylamino-1-
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 2233-18-3, 3,5-Dimethyl-4-hydroxybenzaldehyde 5392-12-1,
 2-Methoxy-1-naphthaldehyde 6203-18-5, 4-
 Dimethylaminocinnamaldehyde 7311-34-4, 3,5-
 Dimethoxybenzaldehyde 7770-45-8, 4-Hydroxy-1-
 naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde
 13677-79-7, 3,4,5-Trihydroxybenzaldehyde 13984-15-1,
 1-Ethyl-2-methylquinolinium chloride 15971-29-6, 4-Methoxy-1-
 naphthaldehyde 17754-90-4, 4-Diethylamino-2-
 hydroxybenzaldehyde 18278-34-7, 4-Hydroxy-2-
 methoxybenzaldehyde 29865-90-5, 3,4-Dimethoxy-5-
 hydroxybenzaldehyde 84562-48-1, 4-Dimethylamino-2-
 methoxybenzaldehyde 87345-53-7, 3,5-Dimethoxy-4-
 hydroxycinnamaldehyde 90134-10-4, 4-
 Dibutylaminobenzaldehyde 95296-28-9, 1-Ethyl-4-
 methylquinolinium chloride 100980-82-3 106001-58-5,
 4-Diethylamino-3-methoxybenzaldehyde 116209-27-9,
 3-Methoxy-4-(1-pyrrolidinyl)benzaldehyde 187030-52-0,
 5-[4-(Diethylamino)phenyl]-2,4-pentadienal
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hair dye compns. containing aromatic
 aldehydes and quinolinium derivative)

IT 100-10-7, 4-Dimethylaminobenzaldehyde 1971-81-9

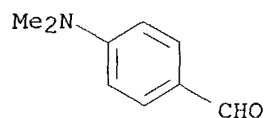
, 4-Dimethylamino-1-naphthaldehyde 6203-18-5, 4-Dimethylaminocinnamaldehyde 84562-48-1, 4-Dimethylamino-2-methoxybenzaldehyde 90134-10-4, 4-Dibutylaminobenzaldehyde

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye compns. containing aromatic aldehydes and quinolinium derivative)

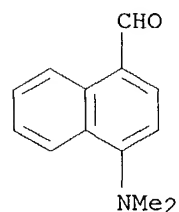
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CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



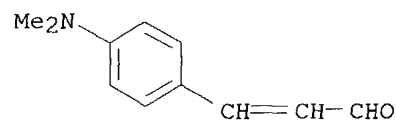
RN 1971-81-9 HCAPLUS

CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



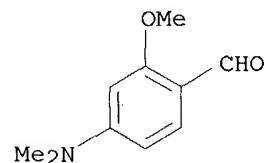
RN 6203-18-5 HCAPLUS

CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



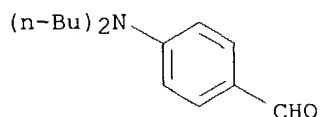
RN 84562-48-1 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



RN 90134-10-4 HCAPLUS

CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 22 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:298859 HCAPLUS
DN 134:315874
TI Dibenzopyrroles for use in dyeing keratin fibers
IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
PA Henkel K.-G.a.A., Germany
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19951135	A1	20010426	DE 1999-19951135	19991023
	WO 2001030312	A1	20010503	WO 2000-EP10198	20001017
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	DE 1999-19951135	A	19991023		
OS	MARPAT 134:315874				
AB	Dibenzopyrroles may be combined with other organic compds. for use in hair dye formulations. Other compds. may include 2-chloro-p-phenylenediamine, 4-aminophenol, o-phenylenediamine, 3,4-methylenedioxyaniline, etc. In addition, compds. such as 1,2,3,3-tetramethyl-3H-indolium methanesulfonate, barbituric acid, thiobarbituric acid, oxindole, etc. may be added.				
IC	ICM A61K007-13				
CC	62-3 (Essential Oils and Cosmetics)				
IT	59-48-3, Oxindole 62-53-3, Aniline, biological studies 65-49-6, 4-Aminosalicic acid 67-52-7, Barbituric acid 71-00-1, Histidine, biological studies 77-32-7 81-11-8, 4,4'-Diaminostilbene-2,2'-disulfonic acid 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 84-65-1D, Anthraquinone, derivs. 86-74-8D, Dibenzopyrrole, derivs. 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5, 4-Chlororesorcinol 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 98-79-3, Pyrrolidone-5-carboxylic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 100-01-6, 4-Nitroaniline, biological studies 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenylether 103-82-2, Phenylacetic acid, biological studies 106-50-3, p-Phenylenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, Resorcinol, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucin				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

109-00-2, 3-Hydroxypyridine 110-85-0, Piperazidine, biological studies
 110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological
 studies 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 118-70-7,
 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-59-5,
 4,4'-Diaminodiphenylsulfoxide 119-70-0, 4,4'-Diaminodiphenylamine-2-
 sulfonic acid 120-80-9, Pyrocatechol, biological studies 121-47-1,
 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic acid
 123-30-8, 4-Aminophenol 123-31-9, Hydroquinone, biological studies
 123-75-1, Pyrrolidine, biological studies 139-65-1, 4,4'-
 Diaminodiphenylsulfide 141-84-4, Rhodanine 141-86-6,
 2,6-Diaminopyridine 142-08-5, 2-Hydroxypyridine 147-85-3, Proline,
 biological studies 149-91-7, Gallic acid, biological studies 150-13-0,
 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-75-4,
 4-Methylaminophenol 150-76-5, 4-Methoxyphenol 156-81-0,
 2,4-Diaminopyrimidine 288-13-1, Pyrazole 288-32-4, Imidazole,
 biological studies 288-88-0, 1H-1,2,4-Triazole 452-58-4,
 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0 488-87-9,
 2,5-Dimethylresorcinol 496-73-1, 4-Methylresorcinol 498-94-2,
 Piperidine-4-carboxylic acid 498-95-3, Piperidine-3-carboxylic acid
 500-85-6D, Indophenol, derivs. 504-15-4, 5-Methylresorcinol 504-17-6,
 Thiobarbituric acid 504-24-5, 4-Aminopyridine 504-29-0,
 2-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 533-31-3,
 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-75-1,
 Piperidine-2-carboxylic acid 535-87-5, 3,5-Diaminobenzoic acid
 537-65-5, 4,4'-Diaminodiphenylamine 553-86-6, Cumaranone 578-66-5,
 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline
 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6,
 2,3-Diaminobenzoic acid 606-55-3 608-08-2, 3-Indoxyl acetate
 608-25-3, 2-Methylresorcinol 610-74-2, 2,5-Diaminobenzoic acid
 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone
 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene
 616-45-5, Pyrrolidone 616-47-7, 1-Methylimidazole 619-05-6,
 3,4-Diaminobenzoic acid 623-09-6, 4-Methylaminoaniline 626-64-2,
 4-Hydroxypyridine 636-25-9, 2,5-Diaminophenol 876-87-9 934-22-5,
 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine
 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1123-55-3,
 7-Aminobenzothiazole 1123-93-9, 5-Aminobenzothiazole 1125-60-6,
 5-Aminoisoquinoline 1197-55-3, 4-AminoPhenylacetic acid 1455-77-2,
 3,5-Diamino-1,2,4-triazole 1483-97-2 1484-05-5 1571-72-8,
 3-Amino-4-hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole 1953-54-4,
 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9,
 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole
 2654-52-6, 2,3-Dimethylbenzothiazolium p-toluenesulfonate 2785-06-0,
 2,3-Dimethylbenzothiazolium iodide 2835-95-2, 2-Methyl-5-aminophenol
 2835-99-6, 3-Methyl-4-aminophenol 2871-01-4, 2-Nitro-4-amino-1-(2-
 hydroxyethylamino)benzene 3131-52-0, 5,6-Dihydroxyindole 3158-63-2,
 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid
 3215-37-0 3342-78-7, 2-AminoPhenylacetic acid 3855-78-5,
 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine 4331-29-7,
 7-Aminobenzimidazole 4506-66-5, 1,2,4,5-Tetraaminobenzene
 tetrahydrochloride 4928-43-2, 2-Dimethylamino-5-aminopyridine
 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5131-58-8 5192-03-0,
 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole
 5217-47-0, 1,3-Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole
 5345-47-1, 2-Aminonicotinic acid 5418-63-3, 1,2,3,3-Tetramethyl-3H-
 indolium iodide 5434-20-8, 3-Aminophthalic acid 5718-83-2,
 Rhodanine-3-acetic acid 5930-28-9, 2,6-Dichloro-4-aminophenol
 5959-52-4, 3-Amino-2-naphthoic acid 6201-65-6, 2-Chlororesorcinol

6259-50-3, 6-Dimethylamino-4-hydroxy-2-naphthalenesulfonic acid
 6358-09-4, 2-Amino-6-chloro-4-nitrophenol 6399-72-0,
 6-Amino-7-hydroxynaphthalene-2-sulfonic acid 6628-04-2,
 4-Aminoquinoline 6967-12-0, 6-Aminoindazole 7411-49-6
7570-45-8 7575-35-1 7749-47-5, 2-Amino-4-methoxy-6-
 methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol 13754-19-3,
 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline
 14338-36-4, 3-AminoPhenylacetic acid 14501-66-7 16082-33-0,
 3,5-Diaminopyrazole 16867-03-1, 2-Amino-3-hydroxypyridine 18073-18-2
 19335-11-6, 5-Aminoindazole 20103-09-7, 2,5-Dichloro-p-phenylenediamine
 21240-56-2 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3,
 2,4,5-Triaminopyridine 23894-07-7, 3,6-Dihydroxy-2,7-
 naphthalenedisulfonic acid 24119-24-2, N,N-Bis-[2-(4-
 aminophenoxy)ethyl]methylamine trihydrochloride 24144-00-1,
 1,4-Dimethylquinazolinium iodide 28020-38-4, 2,3-Diamino-6-
 methoxypyridine 28491-52-3 29539-03-5, 5,6-Dihydroxyindoline
 29705-39-3 31905-57-4D, Nitrophenylenediamine, derivs. 41946-53-6
 42952-29-4, 1-Ethyl-2-methylnaphtho[1,2-d]thiazolium p-toluenesulfonate
 43093-74-9D, Nitroaminophenol, derivs. 50610-28-1 51387-92-9
 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)-phenol 58480-17-4,
 1,2-Dimethylnaphtho[1,2-d]thiazolium p-toluenesulfonate 61224-35-9
 61693-42-3, 3-Amino-2,4-dichlorophenol 62496-02-0, 2-Methylamino-4,5,6-
 triaminopyrimidine 66566-48-1 66635-40-3, 4,4'-Diaminostilbene
 dihydrochloride 70643-19-5, 2,4-Diaminophenoxyethanol 74918-21-1,
 1,3-Bis-(2,4-diaminophenoxy)propane tetrahydrochloride 79352-72-0,
 4-Amino-2-aminomethylphenol 83763-47-7 84540-47-6,
 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1, 6-Methyl-3-amino-2-
 chlorophenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4,
 4-Hydroxyindoline 90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine
 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 104333-09-7,
 2-Hydroxymethyl-4-aminophenol 110102-86-8, 2-Methyl-5-amino-4-
 chlorophenol 110952-48-2 114402-54-9, 1,3-Bis-(4-
 aminophenylamino)propane 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene
 117907-43-4 128729-30-6, 1,3-Bis-[(4-aminophenyl)-2-
 hydroxyethylamino]propan-2-ol 130582-56-8, 1,3-Bis-(4-
 aminophenylamino)propan-2-ol 137290-86-9, 5-(2-Hydroxyethylamino)-4-
 methoxy-2-methylphenol 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline
 166035-63-8 202525-71-1 202525-73-3, 2,4,5-Triaminophenol
 trihydrochloride 202525-74-4, Pentaaminobenzene pentahydrochloride
 202525-75-5, Hexaaminobenzene hexahydrochloride 202525-76-6,
 2,4,6-Triaminoresorcinol trihydrochloride 202525-77-7 202525-78-8,
 4,6-Diaminopyrogallol dihydrochloride 202525-79-9 215377-52-9,
 3,4-Methylenediaminoaniline 220118-56-9 223383-77-5,
 4-Amino-3-hydroxynaphthalenesulfonic acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(dibenzopyrroles for use in dyeing **keratin** fibers)

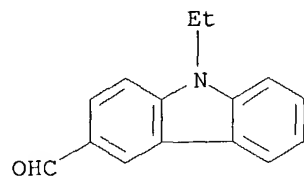
IT **7570-45-8**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(dibenzopyrroles for use in dyeing **keratin** fibers)

RN 7570-45-8 HCAPLUS

CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



L69 ANSWER 23 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:298858 HCAPLUS

DN 134:315873

TI **Aromatic aldehydes and ketones** with imidazoles as coloring agents for **keratin** fibers

IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19951134	A1	20010426	DE 1999-19951134	19991023
	WO 2001034106	A1	20010517	WO 2000-EP10125	20001014
	W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1235549	A1	20020904	EP 2000-971379	20001014
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	JP 2003513898	T2	20030415	JP 2001-536107	20001014
PRAI	DE 1999-19951134	A	19991023		
	WO 2000-EP10125	W	20001014		
OS	MARPAT 134:315873				
AB	Oxidative hair dyes containing aromatic aldehydes and ketones combined with imidazoles and other heterocyclic compds. are disclosed. Aromatic components may include salicylaldehyde , 3-hydroxybenzaldehyde, 4-hydroxybenzaldehyde, o-anisaldehyde, etc. Heterocyclic components may include 1,4-dimethylquinolinium salts, 1,2-dimethylquinolinium salts, 1,4-dimethylpyridinium salts, 3-ethyl-2-methylbenzothiazolium salts, etc. These may be combined with rhodanine, barbituric acid, thiobarbituric acid, oxindole, etc.				
IC	ICM A61K007-13				
CC	62-3 (Essential Oils and Cosmetics)				
ST	oxidative hair dye arom ketone				
IT	Shampoos (aromatic aldehydes and ketones with imidazoles as coloring agents for keratin fibers)				
IT	Keratins RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent) (aromatic aldehydes and ketones with imidazoles as coloring agents for keratin fibers)				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

- IT Alkaline earth **salts**
 Bromides, biological studies
 Chlorides, biological studies
 Iodides, biological studies
 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 (aromatic aldehydes and ketones with imidazoles as coloring agents for **keratin** fibers)
- IT **Hair** preparations
 (dyes, oxidative; aromatic aldehydes and ketones with imidazoles as coloring agents for **keratin** fibers)
- IT 59-48-3, Oxindole 67-52-7, Barbituric acid 71-00-1, Histidine, biological studies 75-75-2D, Methanesulfonic acid, **salts** 75-93-4, Methylsulfate 84-65-1D, Anthraquinone, derivs. 89-84-9 90-02-8, **Salicylaldehyde**, biological studies 93-02-7, 2,5-Dimethoxybenzaldehyde 95-01-2, 2,4-Dihydroxybenzaldehyde 98-11-3D, Benzenesulfonic acid, **salts**, biological studies 98-79-3, Pyrrolidone-5-carboxylic acid 99-93-4, 4-Hydroxyacetophenone 100-83-4, 3-Hydroxybenzaldehyde 104-15-4D, p-Toluenesulfonic acid, **salts** 109-00-2, 3-Hydroxypyridine 110-85-0, Piperazine, biological studies 110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 120-14-9, 3,4-Dimethoxybenzaldehyde 120-57-0, Piperonal 121-33-5, Vanillin 123-08-0, 4-Hydroxybenzaldehyde 123-11-5, p-Anisaldehyde, biological studies 123-75-1, Pyrrolidine, biological studies 135-02-4, o-Anisaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde 141-84-4, Rhodanine 142-08-5, 2-Hydroxypyridine 147-85-3, Proline, biological studies 288-13-1, Pyrazole 288-32-4, Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole 458-36-6, **Coniferylaldehyde** 487-70-7, 2,4,6-Trihydroxybenzaldehyde 498-94-2, Piperidine-4-carboxylic acid 498-95-3, Piperidine-3-carboxylic acid 500-85-6D, Indophenol, derivs. 504-17-6, Thiobarbituric acid 535-75-1, Piperidine-2-carboxylic acid 553-86-6, Cumarone 574-96-9, 1-Hydroxy-2-naphthaldehyde 582-24-1, 2-Hydroxyacetophenone 606-23-5, Indan-1,3-dione 608-08-2, 3-Indoxylacetate 613-45-6, 2,4-Dimethoxybenzaldehyde 613-84-3, 2-Hydroxy-5-methylbenzaldehyde 616-45-5, Pyrrolidone 616-47-7, 1-Methylimidazole 621-59-0, Isovanillin 626-64-2, 4-Hydroxypyridine 698-27-1, 2-Hydroxy-4-methylbenzaldehyde 708-06-5, 2-Hydroxy-1-naphthaldehyde 824-42-0, 2-Hydroxy-3-methylbenzaldehyde 1080-12-2, 4-Hydroxy-3-methoxybenzylideneacetone 1080-74-6 1121-26-2 1194-98-5, 2,5-Dihydroxybenzaldehyde 1493-13-6D, Trifluoromethanesulfonic acid, **salts** 2144-08-3, 2,3,4-Trihydroxybenzaldehyde 2233-18-3, 3,5-Dimethyl-4-hydroxybenzaldehyde 2420-16-8, 3-Chloro-4-hydroxybenzaldehyde 2510-01-2 2538-87-6, 4-Hydroxycinnamaldehyde 2786-34-7, 2,3-Dimethylbenzothiazolium chloride 3158-63-2, 1,3-Dimethylthiobarbituric acid 3160-35-8 3392-97-0, 2,6-Dimethoxybenzaldehyde 3541-42-2, 2-Hydroxycinnamaldehyde 3653-04-1 3859-41-4, 1,3-Cyclopentanedione 3934-87-0, 3,4-Dihydroxy-5-methoxybenzaldehyde 4680-08-4, 2,4,6-Trimethylpyrylium chloride 5217-47-0, 1,3-Diethylthiobarbituric acid 5284-74-2 5392-12-1, 2-Methoxy-1-naphthaldehyde 5418-67-7 5718-83-2, Rhodanine-3-acetic acid 7770-45-8, 4-Hydroxy-1-naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde 13677-79-7, 3,4,5-

Trihydroxybenzaldehyde 13984-15-1 15174-69-3, 4-Hydroxy-3-methylbenzaldehyde 15626-30-9 15971-29-6, 4-Methoxy-1-naphthaldehyde 16872-11-0D, Tetrafluoroboric acid, **salts** 19224-32-9 23302-83-2 24677-78-9, 2,3-Dihydroxybenzaldehyde 26153-38-8, 3,5-Dihydroxybenzaldehyde 27945-16-0 28141-13-1 29814-03-7, 3-Ethyl-2-methylbenzothiazolium chloride 31905-57-4D, Nitrophenylenediamine, derivs. 32353-56-3 35094-87-2, 2,4,5-Trihydroxybenzaldehyde 36232-82-3 38039-57-5 38078-47-6 43093-74-9D, Nitroaminophenol, derivs. 55745-70-5 56405-37-9 56405-66-4 57439-26-6 57439-29-9 62439-66-1 63149-01-9 64274-81-3 79407-66-2 87345-53-7 91420-11-0 198704-94-8 199107-25-0 200128-68-3 293742-81-1 335448-84-5 335448-85-6 335448-87-8 335448-89-0 335448-91-4 335448-92-5 335448-94-7 335449-08-6 335449-09-7

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (aromatic aldehydes and ketones with imidazoles as coloring agents for **keratin** fibers)

L69 ANSWER 24 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:96869 HCAPLUS
 DN 134:152366
 TI **Hair dye compositions containing aromatic aldehydes or ketones**
 IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 16 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

applicanta

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19936911	A1	20010208	DE 1999-19936911	19990805
	WO 2001013866	A1	20010301	WO 2000-EP7163	20000802
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1200051	A1	20020502	EP 2000-963997	20000802
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	JP 2003514767	T2	20030422	JP 2001-518006	20000802
PRAI	DE 1999-19936911	A	19990805		
	WO 2000-EP7163	W	20000802		
OS	MARPAT 134:152366				
AB	Hair dyeing compns. contain a combination of aromatic aldehydes and/or ketones with and heterocyclic compds., e.g., quinolinium salts, benzothiazolium salts, and color strengthening agents such as piperidine, pyrrolidine, and pyrazole. Thus, a mixture of 4-dimethylaminobenzaldehyde and 1-ethyl-2-methylquinolinium iodide containing piperidine at a pH of 9.0 gave a violet-red color to the hair.				
IC	ICM A61K007-13				
CC	62-3 (Essential Oils and Cosmetics)				
ST	hair dye arom aldehyde ketone; ethylmethylquinolinium iodide dimethylaminobenzaldehyde piperidine hair dye; quinolinium iodide benzaldehyde piperidine				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

hair dye

IT Aldehydes, biological studies
Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(aromatic; hair dye compns. containing
aromatic aldehydes or ketones)

IT Hair preparations
(dyes; hair dye compns. containing aromatic
aldehydes or ketones)

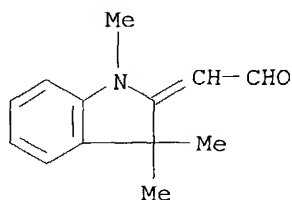
IT 59-48-3 67-52-7, Barbituric acid 71-00-1, Histidine, biological
studies 84-65-1D, Anthraquinone, derivs. 84-83-3
100-10-7 109-00-2, 3-Pyridinol 110-85-0, Piperazidine,
biological studies 110-86-1, Pyridine, biological studies 110-89-4,
Piperidine, biological studies 117-92-0 120-21-8 123-75-1,
Pyrrolidine, biological studies 141-84-4 142-08-5, 2(1H)-Pyridinone
147-85-3, Proline, biological studies 149-87-1 288-13-1, Pyrazole
288-32-4, Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole
487-89-8, 1H-Indole-3-carboxaldehyde 498-94-2,
4-Piperidinecarboxylic acid 498-95-3, 3-Piperidinecarboxylic acid
500-85-6D, Indophenol, derivs. 504-17-6, ThioBarbituric acid 535-75-1,
2-Piperidinecarboxylic acid 579-72-6 606-23-5,
1H-Indene-1,3(2H)-dione 606-55-3 616-45-5, Pyrrolidone 616-47-7
626-64-2, 4-Pyridinol 1199-59-3 1204-86-0
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3915-61-5 4181-05-9 5217-47-0 5718-83-2, Rhodanine 3-acetic
acid 6203-18-5 6285-94-5 7169-34-8, Coumaranone
7570-45-8 10040-98-9 10338-57-5 14933-76-7
18241-33-3D, salts 18241-35-5D, salts 18241-36-6D,
salts 18241-37-7D, salts 18241-44-6D, salts
19012-03-4 20327-08-6 23302-83-2 24235-06-1 28141-13-1
31905-57-4, Nitrophenylenediamine 33985-71-6 40265-71-2D,
salts 41602-56-6 41927-50-8 42846-14-0D,
salts 42846-15-1D, salts 42846-19-5D, salts
42846-38-8D, salts 42922-08-7D, salts 42952-29-4
43093-74-9, Nitroaminophenol 46149-03-5D, salts 46297-20-5D,
salts 50571-73-8D, salts 50579-67-4D, salts
50580-50-2D, salts 51980-54-2 56405-37-9
58028-76-5 60126-37-6D, salts 63149-01-9
63149-33-7 84562-48-1 90134-10-4 96196-21-3
97807-64-2 194099-39-3 323575-81-1 323575-82-2 323575-83-3
323575-84-4 323575-89-9D, halide and sulfonate salts
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair dye compns. containing aromatic
aldehydes or ketones)

IT 84-83-3 100-10-7 120-21-8 487-89-8,
1H-Indole-3-carboxaldehyde 579-72-6 1199-59-3
1204-86-0 1424-66-4 1971-81-9
2124-31-4 4181-05-9 6203-18-5
7570-45-8 10040-98-9 10338-57-5
19012-03-4 33985-71-6 41602-56-6
51980-54-2 58028-76-5 63149-33-7
84562-48-1 90134-10-4
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hair dye compns. containing aromatic

aldehydes or ketones)

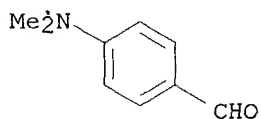
RN 84-83-3 HCAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)



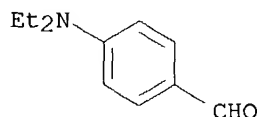
RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



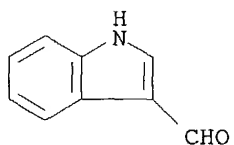
RN 120-21-8 HCAPLUS

CN Benzaldehyde, 4-(diethylamino)- (9CI) (CA INDEX NAME)



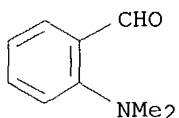
RN 487-89-8 HCAPLUS

CN 1H-Indole-3-carboxaldehyde (9CI) (CA INDEX NAME)



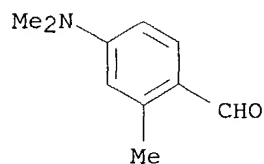
RN 579-72-6 HCAPLUS

CN Benzaldehyde, 2-(dimethylamino)- (9CI) (CA INDEX NAME)

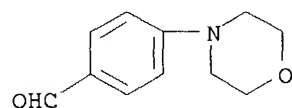


RN 1199-59-3 HCAPLUS

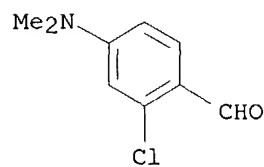
CN Benzaldehyde, 4-(dimethylamino)-2-methyl- (9CI) (CA INDEX NAME)



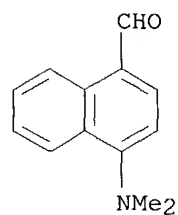
RN 1204-86-0 HCAPLUS
CN Benzaldehyde, 4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



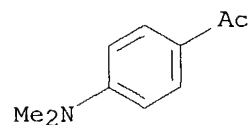
RN 1424-66-4 HCAPLUS
CN Benzaldehyde, 2-chloro-4-(dimethylamino)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 1971-81-9 HCAPLUS
CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)

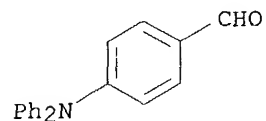


RN 2124-31-4 HCAPLUS
CN Ethanone, 1-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



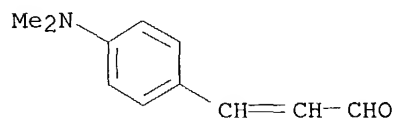
RN 4181-05-9 HCAPLUS

CN Benzaldehyde, 4-(diphenylamino)- (9CI) (CA INDEX NAME)



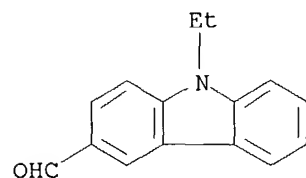
RN 6203-18-5 HCAPLUS

CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



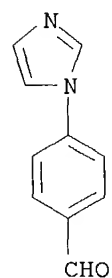
RN 7570-45-8 HCAPLUS

CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



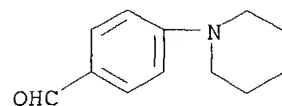
RN 10040-98-9 HCAPLUS

CN Benzaldehyde, 4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



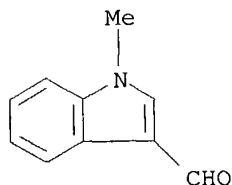
RN 10338-57-5 HCAPLUS

CN Benzaldehyde, 4-(1-piperidinyl)- (9CI) (CA INDEX NAME)



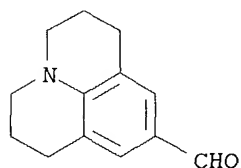
RN 19012-03-4 HCAPLUS

CN 1H-Indole-3-carboxaldehyde, 1-methyl- (9CI) (CA INDEX NAME)



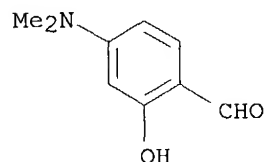
RN 33985-71-6 HCAPLUS

CN 1H,5H-Benzo[ij]quinolizine-9-carboxaldehyde, 2,3,6,7-tetrahydro- (6CI, 8CI, 9CI) (CA INDEX NAME)



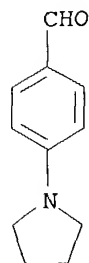
RN 41602-56-6 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)-2-hydroxy- (9CI) (CA INDEX NAME)



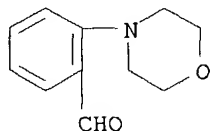
RN 51980-54-2 HCAPLUS

CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

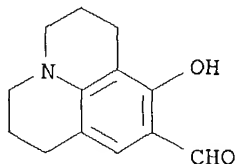


RN 58028-76-5 HCAPLUS

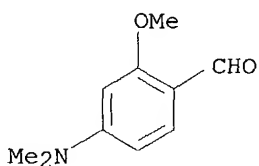
CN Benzaldehyde, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)



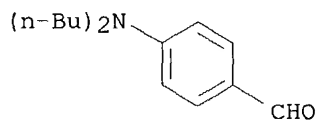
RN 63149-33-7 HCAPLUS
 CN 1H,5H-Benzo[ij]quinolizine-9-carboxaldehyde, 2,3,6,7-tetrahydro-8-hydroxy-
 (9CI) (CA INDEX NAME)



RN 84562-48-1 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



RN 90134-10-4 HCAPLUS
 CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)



L69 ANSWER 25 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:93897 HCAPLUS
 DN 134:168045
 TI **Hair dye compositions containing aromatic aldehydes or ketones**
 IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 14 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19936912	A1	20010208	DE 1999-19936912	19990805

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

WO 2001010398 A1 20010215 WO 2000-EP7164 20000726
W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
EP 1200049 A1 20020502 EP 2000-956288 20000726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI, CY
PRAI DE 1999-19936912 A 19990805
WO 2000-EP7164 W 20000726
OS MARPAT 134:168045
AB **Hair dyeing compns.** contain a **combination** of
aromatic or heteroarom. **aldehydes** and/or ketones with and
heterocyclic compds. and e.g., amino phenols, amines, aromatic nitriles.
Thus, **mixture** of 1-methyl-4-[2-(4-formylphenyl)ethenyl]
quinolinium Me sulfate and 2,5-diaminotoluene sulfate gave a
brown-orange color to the **hair**.
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 27
ST **hair dye arom aldehyde ketone**
IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(amino; **hair dye compns.** containing **aromatic**
aldehydes or ketones)
IT Amines, biological studies
Nitriles, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**aromatic; hair dye compns.** containing
aromatic aldehydes or ketones)
IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(aryl, secondary; **hair dye compns.** containing
aromatic aldehydes or ketones)
IT **Hair preparations**
(dyes; **hair dye compns.** containing **aromatic**
aldehydes or ketones)
IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**hair dye compns.** containing **aromatic**
aldehydes or ketones)
IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(phenolic; **hair dye compns.** containing **aromatic**
aldehydes or ketones)
IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(primary; **hair dye compns.** containing **aromatic**
aldehydes or ketones)
IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(secondary; **hair dye compns.** containing **aromatic**

aldehydes or ketones)

IT 59-48-3, Oxindole 62-53-3D, Aniline, derivs. 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 77-32-7 81-11-8, 4,4'-Diaminostilbene-2,2'-disulfonic acid 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 100-01-6, 4-Nitroaniline, biological studies 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenylether 102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3, p-Phenylenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, Resorcin, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucin 116-63-2 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenylsulfoxide 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-80-9, Pyrocatechol, biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic acid 123-30-8, 4-Aminophenol 123-31-9, Hydroquinone, biological studies 139-65-1, 4,4'-Diaminodiphenylsulfide 141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 149-91-7, Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-75-4 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 452-58-4, 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0 488-87-9, 2,5-Dimethylresorcin 496-73-1 504-15-4 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 504-29-0, 02-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-55-3, 1-Ethylquinaldinium iodide 608-08-2, 3-Indoxylacetate 608-25-3, 2-Methylresorcin 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 614-82-4, 2,4-Dihydroxyphenylacetic acid 615-50-9 615-66-7 615-71-4, 1,2,4-Triaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 623-09-6 636-25-9, 2,5-Diaminophenol 876-87-9, 1-Methylquinaldinium iodide 934-22-5, 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1123-93-9, 5-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid 1455-77-2, 3,5-Diamino-1,2,4-triazole 1571-72-8 1820-80-0, 3-Aminopyrazole 1953-54-4, 5-Hydroxyindole 2374-03-0 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2654-52-6 2785-06-0, 2,3-Dimethylbenzothiazolium iodide 2835-95-2 2835-99-6 2871-01-4 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid 3342-78-7, 2-Aminophenylacetic acid 3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine 4331-29-7, 7-Aminobenzimidazole 4506-66-5, 1,2,4,5-Tetraaminobenzene tetrahydrochloride 4928-43-2, 2-Dimethylamino-5-aminopyridine 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5131-58-8 5192-03-0, 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-

Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole 5345-47-1,
 2-Aminonicotinic acid 5392-28-9 5418-63-3, 1,2,3,3-Tetramethyl-3H-
 indolium iodide 5434-20-8, 3-Aminophthalic acid 5718-83-2,
 Rhodanine-3-acetic acid 5930-28-9 5959-52-4 6201-65-6 6259-50-3,
 6-Dimethylamino-4-hydroxy-2-naphthalenesulfonic acid 6358-09-4,
 2-Amino-6-chloro-4-nitrophenol 6399-72-0 6628-04-2, 4-Aminoquinaldine
 6967-12-0, 6-Aminoindazole 7169-34-8, Coumaranone 7336-20-1
 7411-49-6 7575-35-1 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine
 7768-28-7 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7,
 1,3-Benzodioxol-5-amine 14338-36-4, 3-Aminophenylacetic acid
 16082-33-0, 3,5-Diaminopyrazole 16859-86-2, 1,4-
Dimethylquinolinium iodide 16867-03-1, 2-Amino-3-hydroxypyridine
 19335-11-6, 5-Aminoindazole 20103-09-7 22715-34-0,
 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3, 2,4,5-Triaminopyridine
 23894-07-7, 3,6-Dihydroxy-2,7-naphthalenedisulfonic acid 24119-24-2
 28020-38-4 28491-52-3 29539-03-5, 5,6-Dihydroxyindoline 29705-39-3
 41927-50-8 41946-53-6 42952-29-4, 1-Ethyl-2-methylnaphtho[1,2-
 d]thiazolium p-toluenesulfonate 50610-28-1 51387-92-9 53760-27-3
 54381-16-7 55302-96-0 56216-28-5 58480-17-4, 1,2-Dimethylnaphtho[1,2-
 d]thiazolium p-toluenesulfonate 61224-35-9 61693-42-3 62496-02-0,
 2-Methylamino-4,5,6-triaminopyrimidine 66566-48-1 66635-40-3,
 4,4'-Diaminostilbene dihydrochloride 70643-19-5, 2,4-
 Diaminophenoxyethanol 73264-13-8D, **salts** 74918-21-1
 74991-01-8D, **salts** 75722-39-3D, **salts** 77523-60-5D,
salts 79352-72-0 83732-72-3 83763-47-7, 2-Amino-4-(2-
 hydroxyethylamino)anisole 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
 84540-50-1 85679-78-3 85926-99-4, 4-Hydroxyindoline 90817-34-8
 93841-24-8 104333-09-7 110102-86-8 110952-48-2 114402-54-9
 115423-86-4 117907-43-4 128729-30-6 130582-56-8 135043-64-0
 137290-86-9 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline 169381-74-2
 202525-71-1 202525-73-3, 2,4,5-Triaminophenol trihydrochloride
 202525-74-4, Pentaaminobenzene pentahydrochloride 202525-75-5,
 Hexaaminobenzene hexahydrochloride 202525-76-6 202525-78-8,
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salts 324757-63-3 324757-64-4 324757-66-6
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(hair dye compns. containing aromatic
 aldehydes or ketones)

IT 89868-58-6P 89868-60-0P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation); USES (Uses)

(hair dye compns. containing aromatic
 aldehydes or ketones)

IT 108-89-4, γ -Picoline 623-27-8, 1,4- **Benzenedicarboxaldehyde**

RL: RCT (Reactant); RACT (Reactant or reagent)

(hair dye compns. containing aromatic
 aldehydes or ketones)

L69 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:45923 HCAPLUS

DN 134:105651

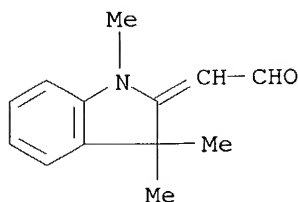
TI **Mixtures** of micropigments for preventing suntanning and inducing
 skin lightening and hair bleaching

IN Fankhauser, Peter; Luther, Helmut; Baschong, Werner

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO Eur. Pat. Appl., 54 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1068866	A2	20010117	EP 2000-810580	20000704
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001048764	A2	20010220	JP 2000-208214	20000710
	CN 1281695	A	20010131	CN 2000-120133	20000711
	US 2002155073	A1	20021024	US 2002-67027	20020204
	US 6495122	B2	20021217		
PRAI	CH 1999-1281	A	19990712		
	US 2000-612748	B1	20000710		
OS	MARPAT 134:105651				
AB	Mixts. of micropigments (e.g., 2,2'-methylenebis[6-(2H-benzotriazol-2-yl)-4-methylphenol]) for preventing suntanning and inducing skin lightening and hair bleaching are described. Thus, 50 parts methylenebis(benzotriazolyl)tetramethylbutylphenol and 50 parts octyltriazone micronized along with Zr silicate and water. This mixture can be used in sunscreen formulations.				
IC	ICM A61K007-48 ICS A61K007-135				
CC	62-4 (Essential Oils and Cosmetics)				
IT	69-72-7D, Salicylic acid, derivs. 76-22-2D, Camphor, derivs. 84-83-3 99-76-3, Methylparaben 104-98-3, Urocanic acid 104-98-3D, Urocanic acid, derivs. 119-61-9D, Benzophenone, derivs. 121-33-5, Vanillin 121-79-9, Propyl gallate 128-37-0, BHT, biological studies 150-13-0, PABA 153-18-4, Rutinic acid 153-18-4D, Rutinic acid, derivs. 476-66-4, Ellagic acid 1135-24-6, Ferulic acid 1135-24-6D, Ferulic acid, derivs. 1314-13-2, Zinc oxide (ZnO), biological studies 1332-37-2, Iron oxide, biological studies 1709-70-2 1820-28-6 6683-19-8 7440-32-6D, Titanium, salts, biological studies 7440-66-6D, Zinc, salts, biological studies 7753-12-0 13463-67-7, Titanium oxide, biological studies 25013-16-5, BHA 30653-05-5 36291-32-4, Citric acid monoglyceride 38358-83-7 61167-58-6 88122-99-0, Octyl triazone 103597-45-1 106764-47-0 182918-01-0 197910-15-9 314241-40-2 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (mixts. of micropigments for preventing tanning and inducing skin lightening and hair bleaching)				
IT	84-83-3 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (mixts. of micropigments for preventing tanning and inducing skin lightening and hair bleaching)				
RN	84-83-3 HCAPLUS				
CN	Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)				



L69 ANSWER 27 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:456846 HCAPLUS

DN 133:79010

TI Hair dye **composition** containing a cationic derivative, a specific aldehyde, a specific ketone, a quinone and a di-iminoisoindoline or a aminoisoindolone derivative

IN Andrean, Herve; Lagrange, Alain

PA L'Oreal, Fr.

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038639	A1	20000706	WO 1999-FR3246	19991222
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2787707	A1	20000630	FR 1998-16378	19981223
	FR 2787707	B1	20020920		
	CA 2320925	AA	20000706	CA 1999-2320925	19991222
	EP 1056434	A1	20001206	EP 1999-961140	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002533371	T2	20021008	JP 2000-590593	19991222
	US 6635090	B1	20031021	US 2000-622710	20001003
PRAI	FR 1998-16378	A	19981223		
	WO 1999-FR3246	W	19991222		

OS MARPAT 133:79010

AB The invention concerns the use for dyeing keratinous fibers of at least a specific cationic derivative, and a compound selected among a specific aldehyde,

a specific ketone, a quinone and a di-iminoisoindoline or 3-amino-isoindolone derivative for dyeing, by reaction without oxidizing agent. A hair dyeing **composition** contained 4-dimethylaminobenzaldehyde 0.447, 3-ethyl-methylbenzothiazolium iodide 0.915, Et alc. 30.0, and water q.s. 100 g. The **composition** is applied on the hair and left for 30 min, then rinsed with water and dried to obtain a lively red color.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST hair dye **compn** aldehyde cationic deriv; iminoisoindoline deriv

hair dye **compn** quinone; aminoisoindolone deriv hair dye

compn ketone

IT Hair preparations

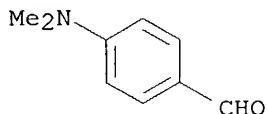
(dyes; hair dye **composition** containing cationic derivative, specific

- aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Glycols, uses
Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(ethers; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Ethers, uses
Ethers, uses
RL: NUU (Other use, unclassified); USES (Uses)
(glycol; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Oxidizing agents
Shampoos
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Aldehydes, biological studies
Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Alcohols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT Solvents
(organic; hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT 91-56-5, Isatine 100-10-7, 4-Dimethylaminobenzaldehyde
106-51-4, Quinone, biological studies 130-15-4, 1,4-Naphthoquinone
876-87-9, 1,2-Dimethylquinolinium iodide 3119-93-5 3468-11-9
3468-11-9D, derivs. 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide
14352-51-3D, derivs.
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT 3176-77-0 33599-35-8 63149-16-6 280105-65-9
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)
- IT 100-10-7, 4-Dimethylaminobenzaldehyde
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye **composition** containing cationic derivative, specific aldehyde, specific ketone, quinone and di-iminoisoindoline or aminoisoindolone derivative)

RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 28 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:456845 HCAPLUS

DN 133:79009

TI Hair dye **composition** containing a specific active methylene compound, a specific aldehyde, a specific ketone, a quinone and a di-imino-isoindoline or 3-amino-isoindolone derivative

IN Andrean, Herve; Lagrange, Alain

PA L'oreal, Fr.

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038638	A1	20000706	WO 1999-FR3245	19991222
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2787708	A1	20000630	FR 1998-16379	19981223
	FR 2787708	B1	20020913		
	CA 2320922	AA	20000706	CA 1999-2320922	19991222
	EP 1056433	A1	20001206	EP 1999-961139	19991222
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002533370	T2	20021008	JP 2000-590592	19991222
PRAI	FR 1998-16379	A	19981223		
	WO 1999-FR3245	W	19991222		

OS MARPAT 133:79009

AB The invention concerns the use for dyeing keratinous fibers of at least a specific active methylene compound and a compound selected among a specific aldehyde, a specific ketone, a quinone and a di-iminoisoindoline or 3-amino-isoindolone derivative for dyeing, by reaction without oxidizing agent. A hair dyeing **composition** contained 4-dimethylaminobenzaldehyde 0.447, benzofuran-(2H)-one 0.402, Et alc. 30.0, and water q.s. 100 g. The **composition** is applied on the hair and left for 30 min, then rinsed with water and dried to obtain a lively orange color.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST hair dye **compn** aldehyde ketone quinone; iminoisoindoline deriv
hair dye **compn**; aminoisoindolone deriv hair dye **compn**

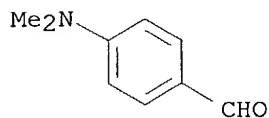
- IT Hair preparations
(dyes; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Glycols, uses
Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(ethers; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Ethers, uses
Ethers, uses
RL: NUU (Other use, unclassified); USES (Uses)
(glycol; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Oxidizing agents
Shampoos
(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Aldehydes, biological studies
Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Alcohols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT Solvents
(organic; hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT 91-56-5, Isatine 100-10-7, 4-Dimethylaminobenzaldehyde
106-51-4, Quinone, biological studies 130-15-4, 1,4-Naphthoquinone
553-86-6, 2(3H)-Benzofuranone 614-16-4, Benzoylacetonitrile
2465-56-7D, Methylene, compds. 2688-49-5 3468-11-9D, derivs.
53175-37-4, 1H-Isoindole-1,3-diamine 93679-99-3D, derivs.
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT 53666-79-8
RL: NUU (Other use, unclassified); USES (Uses)
(hair dye **composition** containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)
- IT 100-10-7, 4-Dimethylaminobenzaldehyde

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye composition containing specific active methylene compound, specific aldehyde, specific ketone, quinone and iminoisoindoline or aminoisoindolone derivative)

RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 29 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:442115 HCAPLUS

DN 133:79001

TI **Quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers

IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 13 pp.

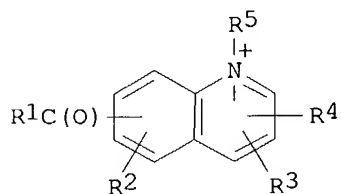
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19859750	A1	20000629	DE 1998-19859750	19981223
	WO 2000038633	A1	20000706	WO 1999-EP9908	19991214
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1139988	A1	20011010	EP 1999-963526	19991214
	EP 1139988	B1	20020925		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 224696	E	20021015	AT 1999-963526	19991214
	ES 2184516	T3	20030401	ES 1999-963526	19991214
PRAI	DE 1998-19859750	A	19981223		
	WO 1999-EP9908	W	19991214		
OS	MARPAT 133:79001				
GI					



I

- AB **Keratin** fibers, especially human **hair**, are dyed yellow, orange, or brown with a **quinolinium** aldehyde or ketone [I; R1 = H, C1-4 alkyl, aryl, heteroaryl; R2-R4 = H, halo, alkyl, alkoxy, hydroxyalkoxy, OH, NO2, (substituted) amino, C1-4 acyl; or any 2 residues of R2-R4 may complete a condensed benzene ring; R5 = C1-4 alkyl or alkenyl, aryl, aralkyl, heteroaryl; Y- = halide, benzenesulfonate, BF4-, p-toluenesulfonate, methanesulfonate, trifluoromethanesulfonate, ClO4-, SO42-, HSO4-, ZnCl42-, N-heterocycle N-oxide]. For a greater range of colors, I are **combined** with ≥1 primary or secondary aliphatic or aromatic amine or alc., N heterocycle, amino acid, oligopeptide, aromatic OH compound, or CH-active compound. These **combinations** can be used with or without the addition of oxidizing agents to produce colors of exceptional brilliance and depth. Thus, a solution containing 7-formyl-1-methylquinolinium trifluoromethanesulfonate 5, 2,5-diaminotoluene sulfate 5, NaOAc 5 mmol, and 1 drop of 20% fatty alkyl ether sulfate in 50 mL H2O (pH 6) was applied to gray **hair** for 30 min at 30° to produce a dark orange-brown color.
- IC ICM A61K007-13
- CC 62-3 (Essential Oils and Cosmetics)
- ST **hair** dye **quinolinium** aldehyde amine; alc
quinolinium ketone **hair** dye
- IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(aliphatic; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)
- IT Amines, biological studies
Nitriles, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(aromatic; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)
- IT Hydroxy compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(aryl; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)
- IT **Hair** preparations
(dyes; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)
- IT Heterocyclic compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(nitrogen; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)
- IT Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(primary; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)
- IT Amino acids, biological studies
Peptides, biological studies
Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)

IT Amines, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(secondary; **quinolinium** aldehydes and ketones for coloring **keratin**-containing fibers)

IT 59-48-3, Oxindole 62-53-3D, Aniline, derivs. 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 91-22-5D, **Quinoline, quaternary salts, derivs.,** biological studies 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5, 4-Chlororesorcinol 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 100-01-6, 4-Nitroaniline, biological studies 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenyl ether 102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3, p-Phenylenediamine, biological studies 108-45-2, m-Phenylenediamine, biological studies 108-46-3, Resorcinol, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucinol 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-80-9, Pyrocatechol, biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3, 4-Aminobenzenesulfonic acid 123-30-8, 4-Aminophenol 123-31-9, Hydroquinone, biological studies 139-65-1, 4,4'-Diaminodiphenyl sulfide 141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 149-91-7, Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 452-58-4, 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0 488-87-9, 2,5-Dimethylresorcinol 496-73-1, 4-Methylresorcinol 504-15-4, 5-Methylresorcinol 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-55-3 608-08-2, 3-Indoxyl acetate 608-25-3, 2-Methylresorcinol 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 615-50-9 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 623-09-6, 4-Methylaminoaniline 636-25-9, 2,5-Diaminophenol 876-87-9 934-22-5, 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid 1455-77-2, 3,5-Diamino-1,2,4-triazole 1571-72-8, 3-Amino-4-hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole 1953-54-4, 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2654-52-6, 2,3-Dimethylbenzothiazolium p-toluenesulfonate 2785-06-0,

2,3-Dimethylbenzothiazolium iodide 2835-95-2, 2-Methyl-5-aminophenol
 2835-99-6, 3-Methyl-4-aminophenol 2871-01-4, 2-Nitro-4-amino-1-(2-
 hydroxyethylamino)benzene 3131-52-0, 5,6-Dihydroxyindole 3158-63-2,
 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid
 3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine
 4331-29-7, 7-Aminobenzimidazole 4506-66-5, 1,2,4,5-Tetraaminobenzene
 tetrahydrochloride 4928-43-2, 2-Dimethylamino-5-aminopyridine
 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5131-58-8 5192-03-0,
 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole
 5217-47-0, 1,3-Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole
 5345-47-1, 2-Aminonicotinic acid 5418-63-3, 1,2,3,3-Tetramethyl-3H-
 indolium iodide 5434-20-8, 3-Aminophthalic acid 5718-83-2,
 Rhodanine-3-acetic acid 5959-52-4, 3-Amino-2-naphthoic acid 6201-65-6,
 2-Chlororesorcinol 6259-50-3, 6-Dimethylamino-4-hydroxy-2-
 naphthalenesulfonic acid 6358-09-4 6399-72-0, 6-Amino-7-
 hydroxynaphthalene-2-sulfonic acid 6628-04-2, 4-Aminoquinaldine
 6967-12-0, 6-Aminoindazole 7169-34-8, Coumaranone 7336-20-1
 7411-49-6 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine
 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7,
 2-(2-Hydroxyethyl)phenol 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7,
 3,4-Methylenedioxyaniline 16082-33-0, 3,5-Diaminopyrazole 16867-03-1,
 2-Amino-3-hydroxypyridine 19335-11-6, 5-Aminoindazole 20103-09-7,
 2,5-Dichloro-p-phenylenediamine 22715-34-0, 2-Hydroxy-4,5,6-
 triaminopyrimidine 23244-87-3, 2,4,5-Triaminopyridine 23894-07-7,
 3,6-Dihydroxy-2,7-naphthalenedisulfonic acid 24119-24-2,
 N,N-Bis[2-(4-aminophenoxy)ethyl]methylamine trihydrochloride 28020-38-4,
 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline
 34572-45-7, 2-Nitro-1-amino-4-[bis(2-hydroxyethyl)amino]benzene
 41927-50-8 46791-37-1D, **salts** 50610-28-1 53666-79-8
 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)phenol 56216-28-5,
 3,5-Diamino-2,6-dimethoxypyridine dihydrochloride 60320-10-7
 61224-35-9 61693-42-3, 3-Amino-2,4-dichlorophenol 62496-02-0,
 2-Methylamino-4,5,6-triaminopyrimidine 66635-40-3, 4,4'-Diaminostilbene
 dihydrochloride 70643-19-5 74918-21-1, 1,3-Bis(2,4-
 diaminophenoxy)propane tetrahydrochloride 79352-72-0,
 4-Amino-2-aminomethylphenol 83732-72-3, 2-Methylamino-3-amino-6-
 methoxypyridine dihydrochloride 83763-48-8 84540-47-6,
 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1, 6-Methyl-3-amino-2-
 chlorophenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4,
 4-Hydroxyindoline 90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine
 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93841-25-9 104333-09-7,
 4-Amino-2-hydroxymethylphenol 110102-86-8, 2-Methyl-5-amino-4-
 chlorophenol 114402-54-9, 1,3-Bis(4-aminophenylamino)propane
 115423-86-4, 1,3-Diamino-2,4-dimethoxybenzene 117907-43-4,
 4-Amino-2-nitrodiphenylamine-2'-carboxylic acid 126335-41-9,
 2,5-Diaminophenol 128729-30-6 130582-56-8, 1,3-Bis(4-
 aminophenylamino)-2-propanol 135043-64-0, 2-Aminomethyl-4-aminophenol
 dihydrochloride 137290-86-9, 5-(2-Hydroxyethylamino)-4-methoxy-2-
 methylphenol 144644-13-3 159661-42-4, 2,5-Dihydroxy-4-
 morpholinoaniline 177080-42-1, 2-Amino-4-(2-hydroxyethylamino)phenol
 202525-71-1 202525-73-3, 2,4,5-Triaminophenol trihydrochloride
 202525-76-6, 2,4,6-Triaminoresorcinol trihydrochloride 202525-77-7
 202525-78-8, 4,6-Diaminopyrogallol dihydrochloride 202525-79-9
 215377-52-9, 3,4-Methylenediaminoaniline 220118-56-9 223383-77-5,
 4-Amino-3-hydroxynaphthalenesulfonic acid 260981-02-0,
 N-(2-Methoxyethyl)-p-phenylenediamine 260981-03-1, 2,3-Dichloro-p-
 phenylenediamine 278807-62-8D, **salts** 278807-63-9D,
salts 278807-64-0D, **salts** 278807-65-1D,

salts 278807-66-2D, **salts** 278807-67-3D,
salts 278807-68-4D, **salts** 278807-69-5D,
salts 278807-70-8D, **salts** 278807-71-9D,
salts 278807-72-0D, **salts** 278807-73-1D,
salts 278807-74-2D, **salts** 278807-75-3D,
salts 278807-76-4D, **salts** 278807-77-5D,
salts 278807-78-6D, **salts** 278807-79-7D,
salts 278807-80-0D, **salts** 278807-81-1D,
salts

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**quinolinium** aldehydes and ketones for coloring
keratin-containing fibers)

L69 ANSWER 30 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:356619 HCAPLUS

DN 133:5817

TI Shrinkproofing agents and shrinkproof methods for animal **hair** fiber products

IN Ishikawa, Mitsuo

PA Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000144577	A2	20000526	JP 1998-330271	19981106
PRAI	JP 1998-330271		19981106		
AB	Shrinkproofing agents contain 100% mixts. of polyalkylene oxide polyols (2-6 functionalities) 5-80, previous polyols treated with aliphatic and/or aromatic isocyanates 0.1-20%, water-soluble and/or -dispersible polyurethanes 5-94.7, divalent-tetravalent metal salts 0.1-7, surfactants (except >C6 alkyl N-containing surfactants) 0.1-20%, 20-200% >C6 alkyl N-containing surfactants, 5-100% aliphatic and/or aromatic aldehydes , and 50-300% hydroxyalkylphosphines. Thus, a shrinkproofing agent contained 100% mixture of polyethylene propylene triol (I) 65.0, a I-hexamethylene diisocyanate reaction product 8.5, a Neotan polyurethane 20.0, Al sulfate 1.5, and polyethylene glycol nonylphenyl ether 5.0%, 20-150% coco fatty acid diethanolamide, 5-100% Relugan, 150-550% mixture of reducing agents, 150-250% Emal 40, and 150-250% Sandet ADX.				
IC	ICM D06M015-568				
	ICS D06M101-10				
CC	40-9 (Textiles and Fibers)				
ST	polyurethane surfactant shrinkproofing animal hair fiber				
IT	Polyurethanes, uses				
	RL: TEM (Technical or engineered material use); USES (Uses)				
	(Neotan; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal hair fiber products)				
IT	Aldehydes, uses				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(aliphatic, Relugan; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal hair fiber products)				
IT	Aldehydes , uses				
	RL: MOA (Modifier or additive use); USES (Uses)				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

- (**aromatic**; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Surfactants
 - (**cationic**; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Amides, uses
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (coco, N,N-bis(hydroxyethyl); shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Amides, uses
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (fatty; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Phosphines
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (hydroxyalkyl; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Surfactants
 - (nonionic; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT **Salts**, uses
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (reducing agents; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Fur
 - Hair**
 - Reducing agents
 - Shrinkproofing (textiles)
 - (shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT **Quaternary** ammonium compounds, uses
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (surfactants; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT Textiles
 - (wool; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT 4706-17-6, Pirugon PP 40
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (Pirugon PP 40, reducing antipilling agents; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT 497-19-8, Sodium carbonate, uses 7631-90-5, Sodium bisulfite
 - 7772-98-7, Sodium thiosulfate
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (reducing agents; shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)
- IT 822-06-0D, Hmdi, reaction products with polyoxyethylene oxypropylene triol
 - 9001-92-7, Protease 9016-45-9, Polyethylene glycol nonylphenyl ether
 - 10043-01-3, Aluminum sulfate 151638-34-5, Enzyme WS
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (shrinkproofing agents containing polyurethane and surfactants and reducing

agents for animal **hair** fiber products)
 IT 111-42-2D, Diethanolamine, coco fatty acid amides 7664-93-9D, Sulfuric acid, alkyl esters, sodium **salt**, uses 9003-11-6D, triol 60650-57-9, Emal 40 270923-13-2, Sandet ADX
 RL: TEM (Technical or engineered material use); USES (Uses)
 (shrinkproofing agents containing polyurethane and surfactants and reducing agents for animal **hair** fiber products)

L69 ANSWER 31 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:603782 HCAPLUS

DN 131:218997

TI Method for permanent waving and coloring of **hair**

IN Hoeffkes, Horst; Buettner, Roswitha; Moeller, Hinrich; Oberkobusch, Doris

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19810887	A1	19990916	DE 1998-19810887	19980313
	WO 9947107	A1	19990923	WO 1999-EP1410	19990304
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9929322	A1	19991011	AU 1999-29322	19990304
	EP 1061891	A1	20001227	EP 1999-910329	19990304
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	DE 1998-19810887	A	19980313		
	WO 1999-EP1410	W	19990304		

AB A process for simultaneously waving and dyeing the **hair** involves use of an aqueous mercapto compound or sulfite as **keratin**-reducing agent and a reactive carbonyl compound as dye in the same solution, followed by rinsing and application of an oxidizing agent. The color may be intensified by addition of a compound with a primary or secondary amino or OH group. Thus, blond **hair** on rollers was treated for 30 min at 20° with a **composition** containing thioglycolic acid 8.0, (NH₄)₂CO₃ 3.0, glutaconaldehyde Na **salt** 1.6, 2-aminomethyl-4-aminophenol 2.0, Cremophor RH 60 3.0, NH₃ for pH adjustment, and H₂O to 100 parts, rinsed with water, treated for 30 min at 20° with 3% aqueous H₂O₂, rinsed, dried, and removed from the rollers; the treated **hair** had a bright copper color.

IC ICM A61K007-09

ICS A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST **hair** waving dyeing carbonyl compd

IT Aldehydes, biological studies

Aldehydes, biological studies

Amines, biological studies

Amines, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(a) animals, semi-; method for permanent waving and coloring of **hair**)

IT Phenols, biological studies

Phenols, biological studies

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(amino; method for permanent waving and coloring of **hair**)

IT Heterocyclic compounds
Heterocyclic compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**aromatic, ketones**; method for permanent waving and
coloring of **hair**)

IT **Aldehydes**, biological studies
Amines, biological studies
Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**aromatic**; method for permanent waving and coloring of
hair)

IT Ketones, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(diketones; method for permanent waving and coloring of **hair**)

IT Aldehydes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(heteroaryl; method for permanent waving and coloring of **hair**
)

IT **Aromatic** compounds
Aromatic compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(heterocyclic, **ketones**; method for permanent waving and
coloring of **hair**)

IT Reducing agents
(method for permanent waving and coloring of **hair**)

IT Acetals
Amino acids, biological studies
Carbonyl compounds (organic), biological studies
Dialdehydes
Imines
Peptides, biological studies
Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(method for permanent waving and coloring of **hair**)

IT Heterocyclic compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(nitrogen; method for permanent waving and coloring of **hair**)

IT **Hair** preparations
(permanent wave; method for permanent waving and coloring of
hair)

IT Amines, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(phenolic; method for permanent waving and coloring of **hair**)

IT Sulfites
Thiols (organic), biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(reducing agents; method for permanent waving and coloring of
hair)

IT Aldehydes, biological studies

Ketones, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)(unsatd.; method for permanent waving and coloring of **hair**)IT 79352-72-0, 2-Aminomethyl-4-aminophenol 83732-72-3, 2-Methylamino-3-
amino-6-methoxypyridine dihydrochloride 138937-28-7,
5,6-Dihydroxyindoline hydrobromide 144644-13-3RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)(color enhancer; method for permanent waving and coloring of
hair)

IT 13129-68-5 24290-36-6

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)(method for permanent waving and coloring of **hair**)

IT 68-11-1, Thioglycolic acid, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)(reducing agent; method for permanent waving and coloring of
hair)IT 68-11-1D, Thioglycolic acid, esters 68-11-1D, Thioglycolic acid,
salts 79-42-5D, Thiolactic acid, esters 79-42-5D, Thiolactic
acid, **salts**RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)(reducing agents; method for permanent waving and coloring of
hair)

L69 ANSWER 32 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:254092 HCAPLUS

DN 130:301487

TI Use of onium aldehydes and onium ketones for dyeing fibers containing
keratin

IN Moeller, Hinrich; Hoeffkes, Horst

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 10 pp.

CODEN: GWXXBX

DT Patent

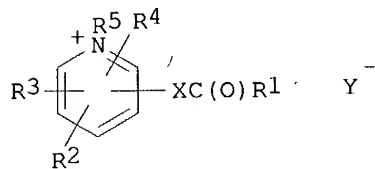
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19745356	A1	19990415	DE 1997-19745356	19971014
	WO 9918916	A2	19990422	WO 1998-EP6308	19981005
	WO 9918916	A3	19990701		
	W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9896295	A1	19990503	AU 1998-96295	19981005
	AU 731808	B2	20010405		
	EP 1037586	A1	20000927	EP 1998-950106	19981005
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, FI				
	JP 2001519371	T2	20011023	JP 2000-515554	19981005
	US 6371993	B1	20020416	US 2000-529560	20000619

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

PRAI DE 1997-19745356 A 19971014
 WO 1998-EP6308 W 19981005
 OS MARPAT 130:301487
 GI



- AB **Combinations** of onium aldehydes and ketones [I; R1 = H, C1-4 alkyl, aryl, heteroaryl; R2-R4 = H, halo, C1-4 alkyl or alkoxy or acyl, OH, NO2, CF3, aryl, (substituted) amino, etc.; R5 = C1-4 alkyl, aryl, heteroaryl, aralkyl; X = bond, (substituted) vinylene or phenylene; Y = halide, PhSO3-, p-toluenesulfonate, MeSO3-, F3CSO3-, ClO4-, HSO4-, etc.] with ≥ 1 compound containing a primary or secondary amino or OH group and/or ≥ 1 CH-active compound, or their reaction products, are useful for production of dyes for **hair**, wool, furs, and synthetic fibers without requiring the use of oxidizing agents such as H2O2. The amines and hydroxy compds. may include N-heterocycles, amino acids, oligopeptides, and aromatic hydroxy compds. Dyeing may be enhanced by addition of ammonium or metal **salts**. Thus, a **mixture** of 4-formyl-1-methylpyridinium benzenesulfonate 10, 2-(methylamino)-3-amino-6-methoxypyridine-2HCl 10, NaOAc 10 mmol, and 1 drop 20% fatty alkyl ether sulfate solution was suspended in 100 mL water, heated briefly to 80°, cooled, filtered, adjusted to pH 6, and applied to gray **hair** for 30 min at 30° to produce an intense dark violet color.
- IC ICM A61K007-13
 ICS D06P003-14; D06P003-30; C07D213-20
- ICA C07D213-89; C07D213-48
- CC 62-3 (Essential Oils and Cosmetics)
- ST onium aldehyde alc amine **hair** dye; pyridinium ketone alc amine **hair** dye
- IT Amines, biological studies
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
 (aromatic; use of onium **aldehydes** and onium **ketones** for dyeing **keratin** fibers)
- IT **Hair** preparations
 (dyes, oxidative; use of onium aldehydes and onium ketones for dyeing **keratin** fibers)
- IT **Hair** preparations
 (dyes; use of onium aldehydes and onium ketones for dyeing **keratin** fibers)
- IT Heterocyclic compounds
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
 (nitrogen, hydroxylated; use of onium aldehydes and onium ketones for dyeing **keratin** fibers)
- IT Alcohols, biological studies
 Amines, biological studies
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(primary; use of onium aldehydes and onium ketones for dyeing
keratin fibers)

IT Alcohols, biological studies

Amines, biological studies

RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(secondary; use of onium aldehydes and onium ketones for dyeing

keratin fibers)

IT Amino acids, biological studies

Peptides, biological studies

Phenols, biological studies

RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(use of onium aldehydes and onium ketones for dyeing **keratin** fibers)

IT Amino acids, biological studies

RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(ω-amino acids; use of onium aldehydes and onium ketones for dyeing **keratin** fibers)

IT 59-48-3, Oxindole 62-53-3D, Aniline, derivs. 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5 95-88-5, 4-Chlororesorcinol 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 101-77-9 101-80-4 102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3, 1,4-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucinol 118-12-7, Fischer's base 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-72-9D, Indole, derivs. 120-80-9, 1,2-Benzenediol, biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3 123-30-8 123-31-9, 1,4-Benzenediol, biological studies 139-65-1, 4,4'-Diaminodiphenyl sulfide 141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 149-91-7, Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 452-58-4, 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0 488-87-9, 2,5-Dimethylresorcinol 496-73-1, 4-Methylresorcinol 504-15-4, 5-Methylresorcinol 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-55-3 608-25-3 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 615-50-9 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene

619-05-6 623-09-6, 4-Methylaminoaniline 636-25-9, 2,5-Diaminophenol
 876-87-9 934-22-5, 5-Aminobenzimidazole 1004-74-6,
 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-
 triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1125-60-6, 5-
Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid
 1455-77-2, 3,5-Diamino-1,2,4-triazole 1571-72-8, 3-Amino-4-
 hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole 1953-54-4,
 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9,
 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole
 2654-52-6, 2,3-Dimethylbenzothiazolium p-toluenesulfonate 2785-06-0,
 2,3-Dimethylbenzothiazolium iodide 2835-99-6, 3-Methyl-4-aminophenol
 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-Dimethylthiobarbituric
 acid 3167-49-5, 6-Aminonicotinic acid 3784-97-2, 2-Formyl-1-
 methylpyridinium iodide 3855-78-5, 2,3,4-Trimethylpyrrole 4173-87-9
 4318-76-7, 2,5-Diaminopyridine 4331-29-7, 1H-Benzimidazol-4-amine
 4506-66-5, 1,2,4,5-Tetraaminobenzene tetrahydrochloride 4928-43-2
 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5192-03-0, 5-Aminoindole
 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0,
 1,3-Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole 5345-47-1,
 2-Aminonicotinic acid 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide
 5434-20-8, 3-Aminophthalic acid 5689-64-5, 4-Benzoyl-1-methylpyridinium
 bromide 5718-83-2, Rhodanine-3-acetic acid 5959-52-4,
 3-Amino-2-naphthoic acid 6201-65-6, 2-Chlororesorcinol 6259-50-3
 6399-72-0 6628-04-2, 4-Aminoquinaldine 6967-12-0, 6-Aminoindazole
 7169-34-8, Coumaranone 7216-42-4 7336-20-1, Disodium
 4,4'-diaminostilbene-2,2'-disulfonate 7411-49-6 7575-35-1,
 N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7630-04-8,
 4-Acetyl-1-methylpyridinium iodide 7680-72-0 7749-47-5,
 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol
 13432-98-9 13441-53-7, 4-Formyl-1-methylpyridinium iodide 13441-54-8,
 3-Formyl-1-methylpyridinium iodide 13754-19-3, 4,5-Diaminopyrimidine
 14268-66-7, 3,4-Methylenedioxyaniline 14549-14-5, 2-Acetyl-1-
 methylpyridinium iodide 16082-33-0, 3,5-Diaminopyrazole 16867-03-1,
 2-Amino-3-hydroxypyridine 19335-11-6, 5-Aminoindazole 20103-09-7,
 2,5-Dichloro-p-phenylenediamine 21640-65-3 22715-34-0,
 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3, 2,4,5-Pyridinetriamine
 23894-07-7, 3,6-Dihydroxy-2,7-naphthalenedisulfonic acid 24119-24-2
 28020-38-4, 2,3-Diamino-6-methoxypyridine 29539-03-5,
 5,6-Dihydroxyindoline 31937-78-7 32526-76-4 32526-77-5 34285-40-0,
 4-Benzoyl-1-methylpyridinium iodide 41946-53-6 49647-58-7,
 2,4,5,6-Tetraaminopyrimidine sulfate 53666-79-8 53760-27-3,
 4,4'-Diaminodiphenylamine sulfate 55302-96-0, 2-Methyl-5-(2-
 hydroxyethylamino)phenol 56216-28-5 60320-10-7 61224-35-9
 61693-42-3 62496-02-0, 2-(Methylamino)-4,5,6-triaminopyrimidine
 66566-48-1 66635-40-3 69984-77-6, 7-Aminobenzimidazole 70643-19-5,
 2,4-Diaminophenoxyethanol 74918-21-1 79190-74-2, 2-Formyl-1-
 methylpyridinium chloride 79352-72-0 80030-92-8 82228-89-5
 83732-72-3 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1
 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4,
 4-Hydroxyindoline 90817-34-8, 3-Amino-2-(methylamino)-6-methoxypyridine
 91929-10-1 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93841-25-9
 94442-49-6 104333-09-7 112270-26-5 114402-54-9 115423-86-4
 117891-56-2 122438-75-9 122587-42-2 126335-41-9 128729-30-6
 130582-56-8 135043-64-0 137290-86-9 144644-13-3 145571-38-6
 159555-74-5 159661-42-4 202525-71-1 202525-73-3 202525-74-4
 202525-75-5 202525-76-6 202525-77-7 202525-78-8 202525-79-9
 215377-52-9 220118-56-9 223383-77-5 223397-36-2 223397-37-3
 223397-38-4 223397-39-5 223397-40-8 223397-41-9 223397-42-0

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 223397-54-4 223397-55-5 223397-56-6 223397-57-7 223397-58-8

RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(use of onium aldehydes and onium ketones for dyeing **keratin** fibers)

IT 223397-59-9 223397-60-2 223397-61-3 223397-62-4 223397-63-5
 223397-64-6 223397-65-7 223397-67-9 223397-68-0 223397-69-1
 223397-70-4 223397-71-5 223397-72-6 223397-73-7 223397-74-8
 223397-75-9 223397-76-0 223397-77-1 223397-78-2 223397-79-3
 223397-80-6 223397-81-7 223397-82-8 223397-84-0 223397-85-1
 223397-86-2 223397-87-3 223397-88-4 223397-89-5 223397-90-8
 223397-91-9 223397-93-1 223397-94-2 223397-95-3 223397-96-4
 223397-97-5 223397-98-6 223397-99-7 223398-00-3 223398-01-4
 223398-02-5 223398-03-6 223398-04-7 223398-05-8 223398-06-9
 223398-07-0 223398-08-1 223398-09-2 223398-10-5 223398-11-6
 223398-12-7 223398-13-8 223398-15-0 223398-16-1 223398-17-2
 223398-18-3 223398-19-4 223398-20-7 223398-21-8 223398-22-9
 223398-23-0 223398-24-1 223398-25-2 223398-26-3 223398-27-4
 223398-28-5 223398-29-6 223398-30-9 223398-31-0 223398-32-1
 223398-33-2 223398-34-3 223398-36-5 223398-37-6 223398-38-7
 223398-39-8 223398-40-1 223398-41-2 223398-42-3 223398-43-4
 223398-45-6 223398-46-7 223398-47-8 223398-48-9 223398-49-0
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 223398-56-9 223398-57-0 223398-58-1 223398-59-2 223398-60-5
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 223398-67-2 223398-68-3 223398-69-4 223398-70-7 223398-71-8
 223398-72-9 223398-73-0 223398-74-1 223398-75-2 223398-76-3
 223398-77-4 223398-78-5 223398-79-6 223398-80-9 223398-81-0
 223398-82-1 223398-83-2 223398-84-3 223398-85-4 223398-86-5
 223398-87-6 223398-88-7 223405-51-4 223405-55-8 223405-56-9
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 223405-70-7 223405-72-9 223405-75-2 223405-77-4 223405-79-6
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 223405-93-4 223405-95-6 223405-98-9

RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(use of onium aldehydes and onium ketones for dyeing **keratin** fibers)

L69 ANSWER 33 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:254088 HCAPLUS

DN 130:301484

TI Use of malonaldehyde derivatives for dyeing fibers containing

keratin

IN Moeller, Hinrich; Hoeffkes, Horst

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19745292	A1	19990415	DE 1997-19745292	19971014
	WO 9919558	A2	19990422	WO 1998-EP6311	19981005
	WO 9919558	A3	19990617		

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

W: AU, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE

PRAI DE 1997-19745292 19971014

OS MARPAT 130:301484

AB **Combinations** of malonaldehyde derivs. (R1O)2CHCHR3CH(OR2)2 or HC.tplbond.CCH(OR1)(OR2) [R1, R2 = C1-6 alkyl; R3 = H, C1-4 alkyl or alkoxy, hydroxyalkoxy, (substituted) aryl or heteroaryl; any 2 of R1-R3 may complete a 5-7-membered ring] with ≥ 1 compound containing a primary or secondary amino or OH group and/or ≥ 1 CH-active compound, or their reaction products, are useful for production of dyes for **hair**, wool, furs, and synthetic fibers without requiring the use of oxidizing agents such as H2O2. The amines and hydroxy compds. may include N-heterocycles, amino acids, oligopeptides, and aromatic hydroxy compds. Dyeing may be enhanced by addition of ammonium or metal **salts**. Thus, a **mixture** of malonaldehyde bis(di-Et acetal) 10, 2,5-diaminotoluene sulfate 10, NaOAc 10 mmol, and 1 drop 20% fatty alkyl ether sulfate solution was suspended in 100 mL water, heated briefly to 80°, cooled, filtered, adjusted to pH 6, and applied to gray **hair** for 30 min at 30° to produce an intense brown-orange color.

IC ICM A61K007-13
ICS C07C043-303; D06P003-04; C07D321-00

ICA C07C211-00; C07C215-00; D06P003-14; D06P003-30

CC 62-3 (Essential Oils and Cosmetics)

ST malonaldehyde alc amine **hair** dye; propyne acetal alc amine **hair** dye

IT Amines, biological studies
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**aromatic**; use of **malonaldehyde** derivs. for dyeing fibers containing **keratin**)

IT **Hair** preparations
(dyes, oxidative; use of malonaldehyde derivs. for dyeing fibers containing **keratin**)

IT **Hair** preparations
(dyes; use of malonaldehyde derivs. for dyeing fibers containing **keratin**)

IT Heterocyclic compounds
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(nitrogen, hydroxylated; use of malonaldehyde derivs. for dyeing fibers containing **keratin**)

IT Alcohols, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(primary; use of malonaldehyde derivs. for dyeing fibers containing **keratin**)

IT Alcohols, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(secondary; use of malonaldehyde derivs. for dyeing fibers containing **keratin**)

IT Amino acids, biological studies
Peptides, biological studies
Phenols, biological studies
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological

study); RACT (Reactant or reagent); USES (Uses)
 (use of malonaldehyde derivs. for dyeing fibers containing **keratin**)

- IT Amino acids, biological studies
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
 (ω-amino acids; use of malonaldehyde derivs. for dyeing fibers containing **keratin**)
- IT 59-48-3, Oxindole 62-53-3D, Aniline, derivs. 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6, 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5 95-88-5, 4-Chlororesorcinol 98-37-3, 3-Amino-4-hydroxybenzenesulfonic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 101-77-9 101-80-4 102-32-9, 3,4-Dihydroxyphenylacetic acid 102-52-3, Malonaldehyde bis(dimethyl acetal) 106-50-3, 1,4-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucinol 118-12-7, Fischer's base 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic acid 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-72-9D, Indole, derivs. 120-80-9, 1,2-Benzenediol, biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3 122-31-6, Malonaldehyde bis(diethyl acetal) 123-30-8 123-31-9, 1,4-Benzenediol, biological studies 139-65-1, 4,4'-Diaminodiphenyl sulfide 141-84-4, Rhodanine 141-86-6, 2,6-Diaminopyridine 149-91-7, Gallic acid, biological studies 150-13-0, 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 452-58-4, 2,3-Diaminopyridine 462-08-8, 3-Aminopyridine 480-66-0 488-87-9, 2,5-Dimethylresorcinol 496-73-1, 4-Methylresorcinol 504-15-4, 5-Methylresorcinol 504-17-6, Thiobarbituric acid 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine 517-22-6, 2,4-Dimethyl-3-ethylpyrrole 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine 542-78-9D, Malonaldehyde, derivs., acetals 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene 591-27-5, 3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-55-3 608-25-3 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 615-50-9 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene 619-05-6 623-09-6, 4-Methylaminoaniline 624-67-9D, 2-Propynal, acetals 636-25-9, 2,5-Diaminophenol 876-87-9 934-22-5, 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1125-60-6, 5-Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid 1455-77-2, 3,5-Diamino-1,2,4-triazole 1571-72-8, 3-Amino-4-hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole 1953-54-4, 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2654-52-6, 2,3-Dimethylbenzothiazolium p-toluenesulfonate 2785-06-0,

2,3-Dimethylbenzothiazolium iodide 2835-99-6, 3-Methyl-4-aminophenol
 3131-52-0, 5,6-Dihydroxyindole 3158-63-2, 1,3-Dimethylthiobarbituric
 acid 3167-49-5, 6-Aminonicotinic acid 3855-78-5, 2,3,4-
 Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine 4331-29-7,
 1H-Benzimidazol-4-amine 4506-66-5, 1,2,4,5-Tetraaminobenzene
 tetrahydrochloride 4928-43-2 5007-67-0, 3,3',4,4'-
 Tetraaminobenzophenone 5192-03-0, 5-Aminoindole 5192-04-1,
 7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-
 Diethylthiobarbituric acid 5318-27-4, 6-Aminoindole 5345-47-1,
 2-Aminonicotinic acid 5418-63-3, 1,2,3,3-Tetramethyl-3H-indolium iodide
 5434-20-8, 3-Aminophthalic acid 5718-83-2, Rhodanine-3-acetic acid
 5959-52-4, 3-Amino-2-naphthoic acid 6201-65-6, 2-Chlororesorcinol
 6259-50-3 6399-72-0 6628-04-2, 4-Aminoquinaldine 6967-12-0,
 6-Aminoindazole 7169-34-8, Coumaranone 7336-20-1, Disodium
 4,4'-diaminostilbene-2,2'-disulfonate 7411-49-6 7575-35-1,
 N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7749-47-5,
 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol
 10160-87-9, 3,3-Diethoxy-1-propyne 13754-19-3, 4,5-Diaminopyrimidine
 14268-66-7, 3,4-Methylenedioxyaniline 16082-33-0, 3,5-Diaminopyrazole
 16867-03-1, 2-Amino-3-hydroxypyridine 19335-11-6, 5-Aminoindazole
 20103-09-7, 2,5-Dichloro-p-phenylenediamine 22537-06-0,
 3,3-Dimethoxy-1-propyne 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine
 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7, 3,6-Dihydroxy-2,7-
 naphthalenedisulfonic acid 24119-24-2 28020-38-4, 2,3-Diamino-6-
 methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline 39567-92-5
 41946-53-6 49647-58-7, 2,4,5,6-Tetraaminopyrimidine sulfate 53666-79-8
 53760-27-3, 4,4'-Diaminodiphenylamine sulfate 55302-96-0,
 2-Methyl-5-(2-hydroxyethylamino)phenol 56216-28-5 59845-59-9
 60320-10-7 61224-35-9 61693-42-3 62496-02-0, 2-(Methylamino)-4,5,6-
 triaminopyrimidine 65099-93-6 65099-94-7, Malonaldehyde bis(dibutyl
 acetal) 66566-48-1 66635-40-3 69549-51-5 69984-77-6,
 7-Aminobenzimidazole 70643-19-5, 2,4-Diaminophenoxyethanol 74918-21-1
 79352-72-0 80030-92-8 83732-72-3 84540-47-6, 2,6-Dihydroxy-3,4-
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 dimethoxypyridine 85926-99-4, 4-Hydroxyindoline 90817-34-8,
 3-Amino-2-(methylamino)-6-methoxypyridine 93841-24-8,
 2-(2,5-Diaminophenyl)ethanol 93841-25-9 104333-09-7 114402-54-9
 115423-86-4 126335-41-9 128729-30-6 130582-56-8 135043-64-0
 137290-86-9 144644-13-3 159661-42-4 202525-71-1 202525-73-3
 202525-74-4 202525-75-5 202525-76-6 202525-77-7 202525-78-8
 202525-79-9 215377-52-9 220118-56-9 223383-77-5 223399-01-7
 223399-02-8 223399-03-9

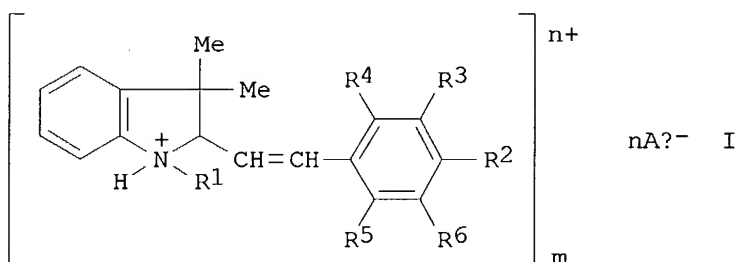
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
 study); RACT (Reactant or reagent); USES (Uses)

(use of malonaldehyde derivs. for dyeing fibers containing **keratin**
)

L69 ANSWER 34 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1999:90562 HCAPLUS
 DN 130:129760
 TI Methine hair dyes
 IN Rose, David; Meinigke, Bernd; Hoeffkes, Horst
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19732016	A1	19990128	DE 1997-19732016	19970725
	WO 9907334	A1	19990218	WO 1998-EP4544	19980721
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9889780	A1	19990301	AU 1998-89780	19980721
	AU 737695	B2	20010830		
	EP 988022	A1	20000329	EP 1998-941388	19980721
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, FI				
	JP 2001513489	T2	20010904	JP 2000-506928	19980721
PRAI	DE 1997-19732016	A	19970725		
	WO 1998-EP4544	W	19980721		
OS	MARPAT 130:129760				
GI					



AB Direct methine hair dyes (I; R1 = C1-4 alkyl, C2-4 hydroxyalkyl; R2 = C1-4 alkoxy, C2-4 hydroxyalkoxy, N+HR8R9, or R2R3 = OCH2O, or R2 and R3 complete a 4H-tetrahydroquinolizine ring; R4, R5 = H, Cl, C1-4 alkoxy, C1-4 hydroxyalkoxy; R8, R9 = R1, or R8NR9 = pyrrolidine, piperidine, or piperazine ring; A = m-valent water-solubilizing anion; n = number of ammonium groups in cation) color the shafts and tips of hair approx. equally, provide intense yellow, red, and violet colors, and are resistant to light and friction. Thus, 2-methylene-1,3,3-trimethylindoline reacted with 2-chloro-4-methoxybenzaldehyde at 80° to produce (after addition of ZnCl2 in concentrated HCl) I (R1 = Me, R2 = OMe, R3 = R5 = R6 = H, R4 = Cl,

A = ZnCl4-, m = 2, n = 1) (II) as red crystals. A hair dye **composition** containing C12-18 fatty alcs. 10, 28% ethoxylated C12-18 fatty alc. Na sulfate 25, H2O 55, II 1, (NH4)2SO4 1, and NH3 solution to pH 9. Application of this **composition** to gray hair for 30 min at 27° produced a deep magenta color.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

IT 118-12-7, 2-Methylene-1,3,3-trimethylindoline 120-57-0,
3,4-Methylenedioxybenzaldehyde 54439-75-7, 2-Chloro-4-methoxybenzaldehyde **84562-48-1**, 2-Methoxy-4-dimethylaminobenzaldehyde

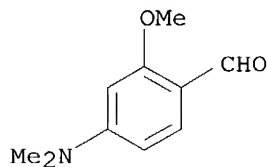
RL: RCT (Reactant); RACT (Reactant or reagent)
(methine **hair** dyes)

IT **84562-48-1**, 2-Methoxy-4-dimethylaminobenzaldehyde

RL: RCT (Reactant); RACT (Reactant or reagent)
(methine **hair** dyes)

RN 84562-48-1 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



L69 ANSWER 35 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:716117 HCAPLUS

DN 129:347137

TI Ketones and aldehydes for dyeing **keratin** fibers

IN Moeller, Hinrich; Hoeffkes, Horst; Meinigke, Bernd

PA Henkel Kommanditgesellschaft Auf Aktien, Germany

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 873745	A2	19981028	EP 1998-106833	19980415
	EP 873745	A3	19991222		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19717222	A1	19981029	DE 1997-19717222	19970424
PRAI	DE 1997-19717222	A	19970424		

AB Nonoxidative or oxidative **hair** dye **compns.** are provided which contain (a) ≥ 1 ketone and/or aldehyde which dyes **hair** either alone or in the presence of (b) ≥ 1 compound with a primary or secondary amino or hydroxy group, together with (c) a color-reinforcing agent comprising piperidine, pyridine, imidazole, pyrrolidine, pyrrolidone, pyrazole, triazole, piperidazine, or their derivs. or **salts**. These **compns.** provide an intensity and fastness of color comparable to conventional oxidative dyes and cause little or no skin sensitization. These **compns.** impart **hair** colors over a wide spectral range, from yellow-orange to brown-black. Thus, a suspension of glutaconaldehyde Na **salt** 10, 2-(2,5-diaminophenyl)ethanol sulfate 10, piperidine 10, NaOAc 10 mmol, and 1 drop 20% fatty alkyl ether sulfate were suspended in 100 mL H₂O, the suspension was heated briefly to 80°, cooled, and filtered, and the pH was adjusted to 6. Gray **hair** exposed to this solution for 30 min at 30° took on an intense red-violet color.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST ketone amine alc **hair** dye; aldehyde amine alc **hair** dye

IT Ketones, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(1,2-diketones; ketones and aldehydes for dyeing **keratin** fibers)

- IT Dicarbonyl compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(1,3-dicarbonyl; ketones and aldehydes for dyeing **keratin**
fibers)
- IT **Aldehydes**, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**aromatic**; ketones and aldehydes for dyeing
keratin fibers)
- IT Amines, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(aryl, secondary; ketones and aldehydes for dyeing **keratin**
fibers)
- IT **Hair** preparations
(dyes, oxidative; ketones and aldehydes for dyeing **keratin**
fibers)
- IT **Hair** preparations
(dyes; ketones and aldehydes for dyeing **keratin** fibers)
- IT Aldehydes, biological studies
Aldehydes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(heteroaryl; ketones and aldehydes for dyeing **keratin** fibers)
- IT Aldehydes, biological studies
Amino acids, biological studies
Ketones, biological studies
Peptides, biological studies
Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(ketones and aldehydes for dyeing **keratin** fibers)
- IT Heterocyclic compounds
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(nitrogen; ketones and aldehydes for dyeing **keratin** fibers)
- IT Alcohols, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(primary; ketones and aldehydes for dyeing **keratin** fibers)
- IT Alcohols, biological studies
Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(secondary; ketones and aldehydes for dyeing **keratin** fibers)
- IT 50-71-5, Alloxan 59-48-3, Oxindole 65-49-6, 4-Aminosalicylic acid
67-52-7, Barbituric acid 83-30-7 83-56-7, 1,5-Dihydroxynaphthalene
87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1,
Pyrogallol 88-21-1, 2-Aminobenzenesulfonic acid 89-57-6,
5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1,
2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-
hydroxynaphthalene-2,7-disulfonic acid 91-56-5, Isatin 91-56-5D,
Isatin, derivs. 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9 95-54-5,
o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5,

2,5-Diaminotoluene 95-88-5, 4-Chlororesorcinol 98-37-3,
 3-Amino-4-hydroxybenzenesulfonic acid 99-05-8, 3-Aminobenzoic acid
 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid
 99-50-3, 3,4-Dihydroxybenzoic acid 101-77-9, 4,4'-Diaminodiphenylmethane
 101-80-4 102-32-9, 3,4-Dihydroxyphenylacetic acid 106-50-3,
 1,4-Benzenediamine, biological studies 106-51-4D, p-Quinone, derivs.
 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3,
 1,3-Benzenediol, biological studies 108-72-5, 1,3,5-Triaminobenzene
 108-73-6, Phloroglucinol 110-86-1, Pyridine, biological studies
 110-86-1D, Pyridine, derivs., biological studies 110-89-4, Piperidine,
 biological studies 110-89-4D, Piperidine, derivs., biological studies
 116-63-2 118-70-7, 4,5,6-Triaminopyrimidine 118-92-3, 2-Aminobenzoic
 acid 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 119-70-0,
 4,4'-Diaminodiphenylamine-2-sulfonic acid 120-80-9, Pyrocatechol,
 biological studies 121-47-1, 3-Aminobenzenesulfonic acid 121-57-3,
 4-Aminobenzenesulfonic acid 123-30-8 123-31-9, 1,4-Benzenediol,
 biological studies 123-75-1, Pyrrolidine, biological studies
 123-75-1D, Pyrrolidine, derivs., biological studies 139-65-1,
 4,4'-Diaminodiphenyl sulfide 141-84-4, Rhodanine 141-86-6,
 2,6-Diaminopyridine 149-91-7, Gallic acid, biological studies 150-13-0
 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol 150-76-5,
 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 288-13-1, Pyrazole
 288-13-1D, Pyrazole, derivs. 288-32-4, Imidazole, biological studies
 288-32-4D, Imidazole, derivs. 452-58-4, 2,3-Diaminopyridine 462-08-8,
 3-Aminopyridine 480-66-0 485-47-2, Ninhydrin 485-47-2D, Ninhydrin,
 derivs. 488-87-9, 2,5-Dimethylresorcinol 496-73-1, 4-Methylresorcinol
 496-76-4, Isobarbituric acid 498-94-2, Piperidine-4-carboxylic acid
 504-15-4, 5-Methylresorcinol 504-17-6, Thiobarbituric acid 504-24-5,
 4-Aminopyridine 504-29-0, 2-Aminopyridine 505-19-1, Piperidazine
 505-19-1D, Piperidazine, derivs. 517-22-6, 2,4-Dimethyl-3-ethylpyrrole
 533-31-3, 3,4-Methylenedioxyphenol 533-73-3, Hydroxyhydroquinone
 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenylamine
 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline
 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene
 583-63-1D, o-Quinone, derivs. 591-27-5, 3-Aminophenol 603-81-6,
 2,3-Diaminobenzoic acid 606-55-3 608-25-3, 2-Methylresorcinol
 610-74-2, 2,5-Diaminobenzoic acid 611-03-0, 2,4-Diaminobenzoic acid
 611-98-3, 4,4'-Diaminobenzophenone 615-50-9 615-66-7,
 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene 616-45-5,
 2-Pyrrolidone 619-05-6, 3,4-Diaminobenzoic acid 623-09-6 636-25-9,
 2,5-Diaminophenol 934-22-5, 5-Aminobenzimidazole 1004-74-6,
 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-
 triaminopyrimidine 1123-55-3, 7-Aminobenzothiazole 1125-60-6, 5-
Aminoisoquinoline 1197-55-3, 4-Aminophenylacetic acid
 1455-77-2, 3,5-Diamino-1,2,4-triazole 1571-72-8, 3-Amino-4-
 hydroxybenzoic acid 1820-80-0, 3-Aminopyrazole 1953-54-4,
 5-Hydroxyindole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9,
 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole
 2654-52-6, 2,3-Dimethylbenzothiazolium p-toluenesulfonate 2785-06-0,
 2,3-Dimethylbenzothiazolium iodide 2835-95-2, 2-Methyl-5-aminophenol
 2835-99-6, 3-Methyl-4-aminophenol 3131-52-0, 5,6-Dihydroxyindole
 3158-63-2, 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic
 acid 3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diaminopyridine
 4331-29-7, 4-Aminobenzimidazole 4506-66-5, 1,2,4,5-Tetraaminobenzene
 tetrahydrochloride 4928-43-2 5007-67-0, 3,3',4,4'-
 Tetraaminobenzophenone 5192-03-0, 5-Aminoindole 5192-04-1,
 7-Aminoindole 5192-23-4, 4-Aminoindole 5318-27-4, 6-Aminoindole
 5345-47-1, 2-Aminonicotinic acid 5434-20-8, 3-Aminophthalic acid

5718-83-2, Rhodanine-3-acetic acid 5959-52-4, 3-Amino-2-naphthoic acid
 6201-65-6, 2-Chlororesorcinol 6259-50-3 6399-72-0 6628-04-2,
 4-Aminoquinoline 6967-12-0, 6-Aminoindazole 7169-34-8, Coumaranone
 7336-20-1, Disodium 4,4'-diaminostilbene-2,2'-disulfonate 7411-49-6
 7575-35-1, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine 7749-47-5,
 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol
 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline
 16082-33-0, 3,5-Diaminopyrazole 16867-03-1, 2-Amino-3-hydroxypyridine
 19335-11-6, 5-Aminoindazole 20103-09-7, 2,5-Dichloro-p-phenylenediamine
 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3,
 2,4,5-Pyridinetriamine 23894-07-7, 3,6-Dihydroxy-2,7-
 naphthalenedisulfonic acid 24119-24-2 24290-36-6 25186-34-9D,
 3-Aminoacrolein, derivs. 28020-38-4, 2,3-Diamino-6-methoxypyridine
 29539-03-5, 5,6-Dihydroxyindoline 37306-44-8, Triazole 37306-44-8D,
 Triazole, derivs. 41927-50-8 41946-53-6 53666-79-8 55302-96-0,
 2-Methyl-5-(2-hydroxyethylamino)phenol 56216-28-5 60320-10-7
 61693-42-3 62496-02-0, 2-Methylamino-4,5,6-triaminopyrimidine
 66566-48-1 66635-40-3 69984-77-6, 7-Aminobenzimidazole 70643-19-5,
 2,4-Diaminophenoxyethanol 74918-21-1 79352-72-0 83732-72-3
 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1 85679-78-3,
 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4, 4-Hydroxyindoline
 90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine 93841-24-8,
 2-(2,5-Diaminophenyl)ethanol 93841-25-9 104333-09-7 110102-86-8
 114402-54-9 115423-86-4 128729-30-6 130582-56-8 137290-86-9
 159661-42-4 202525-71-1 202525-73-3 202525-74-4 202525-75-5
 202525-76-6 202525-77-7 202525-78-8 202525-79-9 215377-52-9
 215377-53-0 215377-55-2 215377-56-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(ketones and aldehydes for dyeing **keratin** fibers)

IT 149-87-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(ketones and aldehydes for dyeing **keratin** fibers)

IT 144644-13-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(use of benzylidene ketones for dyeing **keratin** fibers)

L69 ANSWER 36 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:668110 HCAPLUS

DN 129:276343

TI Preparation of amino acid derivatives and toiletry **compositions**
 for inhibition of active oxygen

IN Kitazawa, Manabu; Sakamoto, Kazutami; Iwasaki, Keiji

PA Ajinomoto Co., Inc., Japan

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 869115	A2	19981007	EP 1998-302639	19980403
	EP 869115	A3	20000405		
	EP 869115	B1	20031217		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 10279543	A2	19981020	JP 1997-85133	19970403

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

CA 2234272	AA 19981003	CA 1998-2234272	19980402
CN 1197638	A 19981104	CN 1998-108760	19980403
CN 1121215	B 20030917		
US 5985922	A 19991116	US 1998-54508	19980403
PRAI JP 1997-85133	A 19970403		

OS MARPAT 129:276343

AB Novel active O inhibitors soluble in oils contain, as active ingredients, amino acid derivs. $\text{ArCH}_2\text{NHCHR}_1(\text{CH}_2)_n\text{COXR}_2$ [I; Ar = (un)substituted 2-HOC₆H₄, pyridyl; R₁ = amino acid side chain; X = O, NH; R₂ = C₈-22 alkyl; n = 0, 1] or their **salts**. I were prepared by reacting 2-hydroxy **aromatic aldehydes** with long-chain esters or alkylamides of amino acids and hydrogenating the products, or by reacting 2-hydroxy **aromatic aldehydes** with amino acids, hydrogenating the resulting Schiff bases and subjecting the products to esterification or amidation. For example, reductive amination of salicylaldehyde with L-alanine gave N-(hydroxybenzyl)-L-alanine which was esterified with 1-dodecanol to give N-(hydroxybenzyl)-L-alanine lauryl ester. Toiletries, e.g., **hair growth compns.**, dentifrice, sunburn cream, acne lotion, etc. containing I were given and the use of I in the course of the treatment of skin cancer, pigmentation or inflammation is claimed.

IC ICM C07C229-14
ICS C07C229-36; C07C237-06; A61K031-195; A61K031-165; C07D213-36; A61K031-44

CC 34-2 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 62

IT Skin, disease
(pigmentation; preparation of amino acid derivs. and toiletry **compns** for inhibition of active oxygen in the course of the treatment of)

IT Antioxidants
(preparation of amino acid derivs. and toiletry **compns**. for inhibition of active oxygen)

IT Amino acids, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of amino acid derivs. and toiletry **compns**. for inhibition of active oxygen)

IT Dermatitis
Skin, neoplasm
(preparation of amino acid derivs. and toiletry **compns**. for inhibition of active oxygen in the course of the treatment of)

IT 112-53-8, 1-Dodecanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification with N-(hydroxybenzyl)-L-alanine; preparation of amino acid derivs. and toiletry **compns**. for inhibition of active oxygen)

IT 57471-91-7P, N-(2-Hydroxybenzyl)-L-alanine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification; preparation of amino acid derivs. and toiletry **compns**. for inhibition of active oxygen)

IT 213746-18-0P, N-(2-Hydroxybenzyl)-L-alanine lauryl ester 213746-19-1P
213746-20-4P, N-(2-Hydroxybenzyl)glycine lauryl ester 213746-21-5P
213746-22-6P 213746-23-7P 213746-24-8P, N-(2-Hydroxybenzyl)glycine lauramide 213746-25-9P 213746-26-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of amino acid derivs. and toiletry **compns**. for inhibition of active oxygen)

IT 56-41-7, L-Alanine, reactions 110139-25-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination with salicylaldehyde; preparation of amino acid derivs.
and toiletry **comps.** for inhibition of active oxygen)

IT 90-02-8, Salicylaldehyde, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination with L-alanine; preparation of amino acid derivs. and
toiletry **comps.** for inhibition of active oxygen)

L69 ANSWER 37 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:87807 HCAPLUS

DN 128:132250

TI Use of aldehydes for dyeing keratin-containing fibers

IN Moeller, Hinrich; Hoeffkes, Horst; Meinigke, Bernd

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 8 pp.

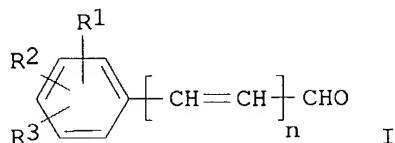
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

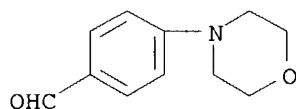
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19630274	A1	19980129	DE 1996-19630274	19960726
	EP 820760	A2	19980128	EP 1997-112195	19970717
	EP 820760	A3	19981021		
	EP 820760	B1	20030402		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 235879	E	20030415	AT 1997-112195	19970717
PRAI	DE 1996-19630274	A	19960726		
OS	MARPAT 128:132250				
GI					



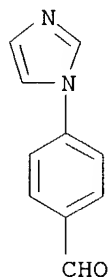
AB Direct hair dyes containing aromatic aldehydes [I; R1 = pyrrolidino, piperidino, morpholino, piperazino, 1-imidazolyl, triazolyl, 1-azepinyl; R2, R3 = H, halo, OH, C1-4 (hydroxy)alkyl, C1-4 alkoxy, or R2R3 completes a 5-7-membered ring; n = 0, 1] produce colors comparable in brilliance and intensity to those produced by oxidative dyes and provide many color nuances. They can also be used on cotton, silk, and other natural fibers, on modified natural fibers such as acetylcellulose, and on synthetic fibers such as polyamide, polyacrylonitrile, polyurethane, and polyester fibers, and may be **combined** with oxidative dyes. Thus, a **combination** of 4-pyrrolidinobenzaldehyde 10, 4,4'-diaminodiphenylamine sulfate 10, NaOAc 10 mmol, and 20% aqueous solution of fatty alkyl ether sulfate 1 drop was briefly heated to 80°, cooled, and filtered to provide a dye solution which conferred an intense brown-violet color on gray hair in 30 min at 30°.

IC ICM A61K007-13

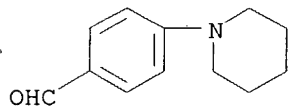
ICS D06P003-04; D06P003-08; D06P001-32
ICA D06P003-14; D06P003-30; C07D295-04; C07D233-56; C07D249-00
CC 62-3 (Essential Oils and Cosmetics)
IT 104-55-2D, Cinnamaldehyde, derivs. 615-50-9 **1204-86-0**,
4-Morpholinobenzaldehyde **10040-98-9**, 4-(1-
Imidazolyl)benzaldehyde **10338-57-5**, 4-Piperidinobenzaldehyde
49647-58-7, 2,4,5,6-Tetraaminopyrimidine sulfate 50333-45-4
51980-54-2, 4-Pyrrolidinobenzaldehyde 53760-27-3,
4,4'-Diaminodiphenylamine sulfate 54381-16-7 56216-28-5 74427-40-0
83732-72-3 93841-25-9 135043-64-0
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(use of aldehydes for dyeing **keratin**-containing fibers)
IT **1204-86-0**, 4-Morpholinobenzaldehyde **10040-98-9**,
4-(1-Imidazolyl)benzaldehyde **10338-57-5**, 4-
Piperidinobenzaldehyde **51980-54-2**, 4-Pyrrolidinobenzaldehyde
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(use of aldehydes for dyeing **keratin**-containing fibers)
RN 1204-86-0 HCAPLUS
CN Benzaldehyde, 4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



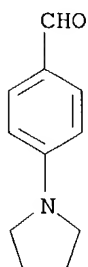
RN 10040-98-9 HCAPLUS
CN Benzaldehyde, 4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



RN 10338-57-5 HCAPLUS
CN Benzaldehyde, 4-(1-piperidinyl)- (9CI) (CA INDEX NAME)



RN 51980-54-2 HCAPLUS
CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



L69 ANSWER 38 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:434085 HCAPLUS

DN 119:34085

TI Hair dyes containing arylamines and arylaldehydes

IN Schultz, Thomas M.; Grillo, Catherine; Kubo, Sanae

PA Shiseido Co., Ltd., Japan

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5199954	A	19930406	US 1992-840522	19920225
PRAI	US 1992-840522		19920225		
AB	Hair dye compos. contain arylamines, arylaldehydes, and an inorg. metal salts having 1-3 valence. Thus, N,N-dimethyl-4-aminocinnamaldehyde, o-phenylenediamine and metal salts (e.g. AlCl ₃ , FeCl ₃) were incorporated into a shampoo. The Hunter Chromicity Values for hair samples shampooed with above composition was 2.25 as compared with 4.96 for control composition with no metal salt.				
IC	ICM A61K007-13				
NCL	008408000				
CC	62-3 (Essential Oils and Cosmetics)				
IT	Salts, biological studies				
	RL: BIOL (Biological study)				
	(hair dye composition containing arylamines and arylaldehydes and)				
IT	101-54-2, N-Phenyl-p-phenylenediamine 106-50-3, p-Phenylenediamine, biological studies 123-30-8, p-Aminophenol 7575-35-1				
	RL: BIOL (Biological study)				
	(hair dye composition containing arylaldehydes and metal salts and)				
IT	77-92-9, biological studies 81-13-0, Panthenol 1344-67-8, Copper chloride 7446-70-0, Aluminum chloride (AlCl ₃), biological studies 7550-35-8, Lithium bromide 7705-08-0, Ferric chloride, biological studies 7773-01-5, Manganese chloride 10377-66-9, Manganese nitrate				
	RL: BIOL (Biological study)				
	(hair dye composition containing arylamines and arylaldehydes and)				
IT	50-70-4, D-Glucitol, biological studies 9004-67-5, Methylcellulose				
	RL: BIOL (Biological study)				
	(hair dye composition containing arylamines and arylaldehydes and metal salts and)				
IT	95-01-2, 2,4-Dihydroxybenzaldehyde 100-10-7, N,N-Dimethyl-4-aminobenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde 6203-18-5 52924-20-6				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

58186-71-3

RL: BIOL (Biological study)

(hair dye **composition** containing arylamines and metal salts and)

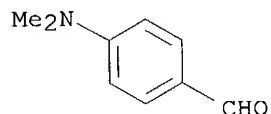
IT 100-10-7, N,N-Dimethyl-4-aminobenzaldehyde 6203-18-5

RL: BIOL (Biological study)

(hair dye **composition** containing arylamines and metal salts and)

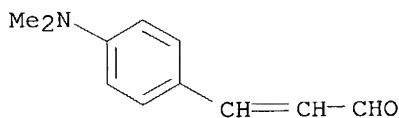
RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 6203-18-5 HCAPLUS

CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



L69 ANSWER 39 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:541999 HCAPLUS

DN 115:141999

TI A hair dye **composition** containing amines and aldehydes

IN Wenke, Gottfried

PA Clairol, Inc., USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5034014	A	19910723	US 1990-539777	19900618
	CA 2021297	AA	19911219	CA 1990-2021297	19900716
PRAI	US 1990-539777		19900618		

OS MARPAT 115:141999

AB The hair is treated with an aqueous solution containing an aromatic amine, an aromatic

aldehyde, 2,6-dihydroxypyridine, and an oxidizing agent, preferably H2O2, at a pH 5-7 for <20 min. When hair is exposed to the solution, a reaction between the amine and the aldehyde and a reaction between 2,6-dihydroxypyridine and H2O2 take place on hair independently. Thus, a hair dye was prepared by dissolving p-aminophenol 0.02, p-dimethylaminocinnamaldehyde 0.02, 2,6-dihydroxypyridine 2, and H2O2 in a hydro-alc. soln. containing 20 % EtOH.

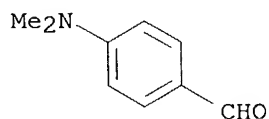
IC ICM A61K007-13

NCL 008408000

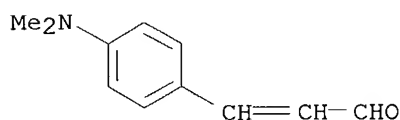
CC 62-3 (Essential Oils and Cosmetics)

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IT Amines, biological studies
 RL: BIOL (Biological study)
 (aryl, hair dye **composition** containing, oxidative)
 IT 95-01-2, 2,4-Dihydroxybenzaldehyde 100-10-7,
 p-Dimethylaminobenzaldehyde 106-50-3, p-Phenylenediamine, biological
 studies 123-30-8, p-Aminophenol 615-66-7 626-06-2,
 2,6-Dihydroxypyridine 1003-29-8, Pyrrole-2-carboxaldehyde
6203-18-5, p-Dimethylaminocinnamaldehyde 7722-84-1, Hydrogen
 peroxide, biological studies
 RL: BIOL (Biological study)
 (hair dye **composition** containing, oxidative)
 IT 100-10-7, p-Dimethylaminobenzaldehyde **6203-18-5**,
 p-Dimethylaminocinnamaldehyde
 RL: BIOL (Biological study)
 (hair dye **composition** containing, oxidative)
 RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 6203-18-5 HCAPLUS
 CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



L69 ANSWER 40 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:128785 HCAPLUS

DN 114:128785

TI Indole-aldehyde hair dyes

IN Schultz, Thomas M.

PA Bristol-Myers Squibb Co., USA

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

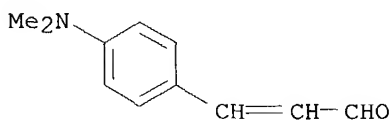
LA English

FAN.CNT 1

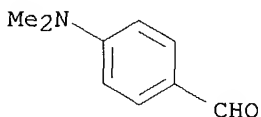
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 370492	A1	19900530	EP 1989-121568	19891121
	EP 370492	B1	19930127		
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	US 4932977	A	19900612	US 1988-274110	19881121
	CA 1333364	A1	19941206	CA 1989-604326	19890629
	JP 02180810	A2	19900713	JP 1989-282078	19891031
	JP 2900043	B2	19990602		
	ES 2053926	T3	19940801	ES 1989-121568	19891121
PRAI	US 1988-274110		19881121		

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

OS MARPAT 114:128785
 AB **Combined** indole-aldehyde **compns.** for dyeing natural fibers, particularly for coloring human hair, are described wherein the **combined** indole-aldehyde **composition** is either preformed or reacted in site on the natural fiber under acidic conditions. A method employing the **compns.** is also presented.
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 41
 IT Dyes
 (for fibers, aldehyde-indole **combinations** as)
 IT Hair preparations
 (dyes, aldehyde-indole **combinations** as)
 IT 56-82-6, Glyceraldehyde 122-78-1, Benzeneacetaldehyde 122-78-1D, Benzeneacetaldehyde, alkyl and alkoxy derivs. **6203-18-5**
 28777-87-9 33774-71-9 91981-42-9 109145-25-7 132550-13-1
 132550-13-1D, N,N-dialkyl and dialkoxy derivs. 132550-14-2
 132550-14-2D, N,N-dialkyl and dialkoxy derivs. 132550-15-3 132550-16-4
 132550-17-5 50-00-0, Formaldehyde, uses and miscellaneous 75-07-0,
 Acetaldehyde, uses and miscellaneous 95-01-2, 2,4-Dihydroxybenzaldehyde
100-10-7, 4-n,n-Dimethylaminobenzaldehyde 104-55-2
 RL: BIOL (Biological study)
 (**hair** dyes containing indoles and)
 IT **6203-18-5 100-10-7**, 4-n,n-Dimethylaminobenzaldehyde
 RL: BIOL (Biological study)
 (**hair** dyes containing indoles and)
 RN 6203-18-5 HCAPLUS
 CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



L69 ANSWER 41 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1962:463250 HCAPLUS
 DN 57:63250
 OREF 57:12650h-i,12651a
 TI Human- or animal-**hair** strengtheners
 PA Veb Farbenfabrik Wolfen.
 SO 2 pp.
 DT Patent
 LA Unavailable
 PATENT NO. KIND DATE APPLICATION NO. DATE

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

PI GB 887045 19620117 GB
 PRAI DE 19570814
 AB A solution of a condensation product of a polynuclear aromatic hydroxy compound at pH 3-5, an aldehyde, and a **salt** of sulfurous acid is added to a **hair** preparation. Thus, a **composition** contains 11% of fatty alcs. containing 14-18 C atoms, 7% fatty alc. sulfonate emulsifier, 0.5% of poly(ethylene oxide) (4-6 ethylene oxide mols.), 3% of fatty acid ester of sperm oil with a synthetic fatty alc. containing 8-9 C atoms, 1% perfume, 69.5% distilled H₂O, and 15% of a 60% aqueous solution of a condensation product of bis(hydroxyphenyl)methane HCHO, and bisulfite.
 CC 40 (Essential Oils and Cosmetics)
 IT **Hair**
 (dressings for, hydroxycoumarin derivative-containing)
 IT Aldehydes
 (reaction products of, with OH compds. and sulfites, **hair** -strengthening **compns.** from)
 IT Sulfites
 (reaction products with aldehydes and OH compds., **hair** -strengthening **compns.** from)
 IT Hydroxy compounds
 (reaction products with aldehydes and sulfites, **hair** -strengthening **compns.** from)
 IT **Hair**
 (strengthening **composition** for weakened, from **aldehyde-aromatic** OH compound-sulfite condensation products)
 IT Imidazole, 1-vinyl-, homopolymer
 (**hair**-grooming and -waving **compns.** from)
 IT 4139-76-8, Coumarin, 4-hydroxy-3-nicotinoyl- 92424-70-9, Coumarin, 4-hydroxy-3-isonicotinoyl- 99001-38-4, Coumarin, 4-hydroxy-3-quinaldoyl- (cosmetics and **hair** dressings containing)
 IT 1076-38-6, Coumarin, 4-hydroxy- (derivs., cosmetics and **hair** dressings containing)
 IT 50-00-0, Formaldehyde
 (reaction products of, with bis(hydroxyphenyl)methane and H sulfites, **hair**-strengthening **compns.** from)
 IT 620-92-8, Phenol, 4,4'-methylenedi- (reaction products with HCHO and H sulfites, **hair** -strengthening **compns.** from)

L69 ANSWER 42 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1959:96130 HCAPLUS

DN 53:96130

OREF 53:17372d-e

TI Aerosol preparations

IN Heimann, Hugo; Kohn, David H.; Israel, Yecheskel

PA Technion Research and Development Foundation Ltd.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 811079		19590402	GB	

AB A **combination** corrosion inhibitor for aerosol prepns. comprises an **aromatic** or araliphatic **aldehyde**, e.g. PhCHO, furfuraldehyde, PhCH₂CHO, or 1-naphthaldehyde, and a basic N-containing aromatic compound, e.g. nicotine, cinchonine, PhNH₂, or **quinoline**. The total amount of inhibitor should preferably be 0.01-1% by weight of the

total aerosol liquid. Examples show the effectiveness of the inhibitor in preventing corrosion of Al aerosol containers containing an insecticide, **hair** lotion, deodorant, or fire-extinguishing preparation

CC 13 (Chemical Industry and Miscellaneous Industrial Products)

L69 ANSWER 43 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1920:19535 HCAPLUS

DN 14:19535

OREF 14:3666i,3667a-h

TI Fluorene series. II

AU Sieglitz, Adolf

CS Univ. Frankfurt a/M.

SO Ber. (1920), 53B, 1232-41

DT Journal

LA Unavailable

AB cf. C. A. 14, 1333. The earlier work has been extended to the condensation of other **aromatic aldehydes** with fluorene (A) and also to 2,7-dibromofluorene (B); it was found that B has a much greater power to condense with aldehydes than A; the colors of the resulting dibromofulvenes are deeper than the corresponding fulvenes from A. The halochromic colors in the new series are not characteristic. 9,9'-Isophthalaldifluorene, from A and 0.5 mol. m-C₆H₄(CHO)₂, light yellow leaflets from C₆H₆-AcOH, m. 178-9°, gives a deep green color with hot concentrated H₂SO₄. 9-p-Bromobenzalfluorene, yellow needles from AcOH, m. 144°, soluble in hot H₂SO₄ with green-blue color. 9-m-Iodobenzalfluorene, yellow microneedles from alc., m. 103°, gives a deep green color with hot H₂SO₄. p-Isomer, light yellow flat prisms from AcOH, m. 121°, gives a sea-blue color with H₂SO₄. 9-Piperonalfluorene, oil crystallizing after a long time, yellow needles from MeOH, m. 72-3°; picrate, dark red needles with green surface luster from AcOEt or EtOH, m. 194-5° (decomposition). Anisalfluorene picrate, C₂₁H₁₆O₂C₆H₃O₇N₃, bright brick-red needles from alc., m. 121° (decomposition). Furfuralfluorene picrate, C₁₈H₁₂O₂C₆H₃O₇N₃, dark red needles from alc., m. 146-7° (decomposition). In attempting to condense the three HOC₆H₄CHO, vanillin and o-OHCC₆H₄CO₂H they were precipitated as their difficultly soluble Na **salts** when their alc. solns. were poured into the ethylate **mixture** and so were unable to react; o-MeOC₆H₄CHO and o-EtOC₆H₄CHO gave non-crystallizable oils which decomposed into A when distilled in vacuo. The B, m. 164°, was obtained in 80-5 g. yield by treating 50 g. A in 200 cc. CHCl₃ in ice with 35 cc. Br in the course of 2 hrs. The condensation products were prepared by dissolving first 0.5 g. Na, then 1.5 g. B in 100 cc. boiling absolute alc., adding the calculated amount of aldehyde in 20 cc. alc., quickly bringing to a boil again and letting stand 1 day; the yields were almost quant. A high melting red substance, probably 2,2',7,7'-tetrabromo-1,4-dibiphenylene-r,3-butadiene, was always formed as by-product. The following 2,7-dibromofluorenes were thus obtained. (unless otherwise stated, they were recrystd. from AcOH): 9-benzal, long, faintly yellow, **hair**-like rodlets, m. 98-9°; o-methylbenzal, orange-yellow leaflets, light yellow when finely powdered, m. 141-2°; m-isomer, yellow prisms, m. 95-60°; p-isomer, yellow **hair**-like felted needles, m. 140-1°; o-ethylbenzal flat yellow prisms and leaves from alc., m. 132-3°; m-isomer, yellow rodlets from MeOH, m. 83-40°; p-isopropylbenzal, yellow felted needles, m. 116-7°; p-aldehydobenzal, orange-yellow needles, m. 218-9° (there is also formed, 2,2',7,7'-tetrabromo-9,9'-terephthalaldifluorene, insol. in AcOH, deep orange leaflets from PhMe, doe not m. 300°); o-chlorobenzal, long canary-yellow needles and rodlets, m. 168-90°; m-isomer, light

yellow microcryst. needles, m. 136-7°; p-isomer, long yellow felted needles, m. 211-2°; m-bromobenzal, yellow needles, m. 152-3°; p-iodobenzal, yellow-orange felted needles, m. 207-8°; o-methoxybenzal, orange-yellow leaflets, m. 154-5°; p-isomer, deep yellow needles, m. 132-3°; piperonal, yellow needles, m. 159-60°; o-nitrobenzal, orange-yellow needles, m. 201-2°; m-isomer, yellow microcryst. druses, m. 154-5; p-isomer, orange-yellow microcryst. powder, m. 195-6°; 2'-chloro-5'-nitrobenzal, ocher-yellow amorphous powder which on very slow crystallization yields yellow needles, softens 190°, M. 212-3°; cinnamal, fine deep yellow felted needles, m. 206-7°; furfural, long yellow felted needles with greenish tinge, m. 190-1°. 2,2', 7,7'-Tetrabromo-9,9'-isophthalaldifluorene, fine light yellow needles from C₆H₆, does not m. 280°. Ethyl 2,7-dibromofluorene-9-oxalate, obtained in 16-8 g. yield from 1.2 g. Na in 200 cc. C₆H₆, and 10 cc. alc. (both distilled from Na) heated with 7.5g. (CO₂Et)₂ and 16.2 g. B 30-45 min. on the H₂O bath, bright yellow needles from AcOH, m. 176°, gives a brown color in alc. with FeCl₃; benzoyl derivative, canary-yellow rodlets from AcOH, m. 152-3°.

CC 10 (Organic Chemistry)

IT 86-73-7, Fluorene
(condensation with **aromatic aldehydes**)

=>

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FILE LAST UPDATED: 21 Jan 2004 (20040121/ED)

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KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

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 OR 90134-10-4/BI OR 96196-21-3/BI OR 97807-64-2/BI)

L4	22	SEA FILE=REGISTRY ABB=ON	L2 AND ALDEHYD?
L6	1	SEA FILE=REGISTRY ABB=ON	L2 AND PHENONE
L7	23	SEA FILE=REGISTRY ABB=ON	L4 OR L6
L9	3	SEA FILE=REGISTRY ABB=ON	L2 AND FORM? AND INDOL?
L10	23	SEA FILE=REGISTRY ABB=ON	L7 OR L9
L40	8820	SEA FILE=HCAPLUS ABB=ON	L10
L41	38	SEA FILE=HCAPLUS ABB=ON	L40(L) (HAIR OR ?KERAT?)
L42	13	SEA FILE=HCAPLUS ABB=ON	L41 AND COMPOSITION?
L44	11	SEA FILE=HCAPLUS ABB=ON	L41 AND COMPNS
L45	17	SEA FILE=HCAPLUS ABB=ON	L42 OR L44
L46	12602	SEA FILE=HCAPLUS ABB=ON	AROM?(4A) (?ALDEHYD? OR ?KETONE?)
L47	38	SEA FILE=HCAPLUS ABB=ON	L46 AND (HAIR OR ?KERAT?)
L51	12	SEA FILE=HCAPLUS ABB=ON	(L41 OR L47) AND COMBIN?
L53	208	SEA FILE=HCAPLUS ABB=ON	(ALDEHYDE? OR KETONE?/IT) (L) (HAIR OR KERAT?)/IT
L54	40	SEA FILE=HCAPLUS ABB=ON	L53(L)AROM?
L55	26	SEA FILE=HCAPLUS ABB=ON	L54 AND (COMPNS OR COMPOSITION? OR COMBIN?)
L56	27649	SEA FILE=HCAPLUS ABB=ON	AROM?(4A) (?ALDEHYD? OR ?KETONE?)
L58	74	SEA FILE=HCAPLUS ABB=ON	L56 AND (HAIR OR ?KERAT?)
L59	39	SEA FILE=HCAPLUS ABB=ON	L58 AND (COMPNS OR COMPOSITION? OR COMBIN?)
L60	41	SEA FILE=HCAPLUS ABB=ON	L55 OR L59
L61	19	SEA FILE=HCAPLUS ABB=ON	L60 AND (SALT# OR CATION?)
L62	4	SEA FILE=HCAPLUS ABB=ON	L41 AND MIXTURE?
L63	4	SEA FILE=HCAPLUS ABB=ON	L60 AND QUAT?
L64	39	SEA FILE=HCAPLUS ABB=ON	L45 OR L51 OR L61 OR L62 OR L63
L65	15	SEA FILE=HCAPLUS ABB=ON	(L58 OR L54) AND MIXTURE?
L66	8	SEA FILE=HCAPLUS ABB=ON	L65 AND (QUAT? OR SALT# OR CATION? OR ?QUINOLIN?)
L67	42	SEA FILE=HCAPLUS ABB=ON	L64 OR L66
L68	13	SEA FILE=HCAPLUS ABB=ON	L60 AND ?QUINOLIN?
L69	43	SEA FILE=HCAPLUS ABB=ON	L67 OR L68

=> d l69 bib abs hitind hitstr 1-43

L69 ANSWER 1 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:875078 HCAPLUS
 DN 139:354146
 TI Oxidative hair dye compositions containing aliphatic

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

or **aromatic aldehydes** for enhancing color intensity
and accelerating the dyeing process

IN Muerner, Hansruedi; Javet, Manuela; Le Cruer, Dominique

PA Wella Aktiengesellschaft, Germany

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003090700	A1	20031106	WO 2002-EP14113	20021212
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10218588	A1	20031106	DE 2002-10218588	20020426
PRAI	DE 2002-10218588	A	20020426		
OS	MARPAT 139:354146				

AB The invention concerns oxidative **hair** dyes composed of developing and coupling agents; aliphatic or **aromatic aldehydes** are added in order to enhance the color intensity of the dyes and to shorten the dyeing process. Direct dyes can be added; hydrogen peroxide is the preferred oxidation agent. Thus a **hair** dye solution contained; 4-amino-3-methylphenol 0.01 mol; 3-amino-6-methylphenol 0.01 mol; EDTA disodium **salt** 0.3 g; ascorbic acid 0.3 g; lauryl ether sulfate 2.8 g; ethanol (96%) 8.0 g; ammonia (25%) 9.0; water to 100 g. 20 G of the dye solution was mixed upon application with 20 g 6 % hydrogen peroxide solution and 1 g of a **mixture** composed of 5 % acetaldehyde in ethanol and water = 1:1. The color enhancer-containing **mixture** resulted in a more intense color compared to the **hair** dye without the enhancer.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST oxidative **hair** dye aldehyde color intensity dyeing acceleration

IT **Aldehydes**, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(aliphatic; oxidative **hair** dye **compns.** containing aliphatic
or **aromatic aldehydes** for enhancing color intensity
and accelerating the dyeing process)

IT **Aldehydes**, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**aromatic**; oxidative **hair** dye **compns.** containing
aliphatic or **aromatic aldehydes** for enhancing color
intensity and accelerating the dyeing process)

IT Dyes

(direct; oxidative **hair** dye **compns.** containing aliphatic
or **aromatic aldehydes** for enhancing color intensity
and accelerating the dyeing process)

IT **Hair** preparations

(dyes, oxidative; oxidative **hair** dye **compns.** containing

- aliphatic or **aromatic aldehydes** for enhancing color intensity and accelerating the dyeing process)
- IT **Hair preparations**
(dyes; oxidative **hair dye compns.** containing aliphatic or **aromatic aldehydes** for enhancing color intensity and accelerating the dyeing process)
- IT Oxidizing agents
(oxidative **hair dye compns.** containing aliphatic or **aromatic aldehydes** for enhancing color intensity and accelerating the dyeing process)
- IT 66-25-1, Hexanal 75-07-0, Acetaldehyde, biological studies 78-84-2, Isobutyraldehyde 80-54-6, p-tert-Butyl- α -methylhydrocinnamic **aldehyde** 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-57-6, 5-Aminosalicylic acid 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol 91-56-5, 2,3-Indolindione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, 4-[Ethyl(2-hydroxyethyl)amino]aniline 93-05-0, 4-Diethylaminoaniline 95-55-6, 2-Aminophenol 95-70-5, 1,4-Diamino-2-methylbenzene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 96-17-3, 2-Methylbutyraldehyde 97-96-1, 2-Ethylbutyraldehyde 99-07-0, 3-Dimethylaminophenol 99-98-9, 4-Dimethylaminoaniline 101-54-2, 4-Phenylaminoaniline 101-86-0, 2-(Phenylmethylene)octanal 103-95-7, 106-23-0, 3,7-Dimethyl-6-octenal 106-50-3, 1,4-Diaminobenzene, biological studies 107-75-5, 3,7-Dimethyl-7-hydroxyoctanal 108-45-2, 1,3-Diaminobenzene, biological studies 110-62-3, Pentanal 111-30-8, Glutaraldehyde 111-71-7, Heptanal 116-26-7, 2,6,6-Trimethyl-1,3-cyclohexadiene-1-carboxaldehyde 120-57-0, Heliotropin 122-40-7, 2-(Phenylmethylene)heptanal 122-78-1, Phenylethanal 123-05-7, 2-Ethylhexanal 123-15-9, 2-Methylpentanal 123-30-8, 4-Aminophenol 123-38-6, Propionaldehyde, biological studies 123-72-8, Butanal 124-13-0, Octanal 137-19-9, 1,5-Dichloro-2,4-dihydroxybenzene 141-86-6, 2,6-Diaminopyridine 150-75-4, 4-Methylaminophenol 399-95-1, 4-Amino-3-fluoro-phenol 399-96-2, 4-Amino-2-fluoro-phenol 533-31-3, 3,4-Methylene dioxypheol 533-73-3, 1,2,4-Trihydroxybenzene 542-78-9, Malondialdehyde 557-48-2, (E,Z)-2,6-Nonadienal 575-38-2, 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 590-86-3, Isopentanal 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-methylbenzene 615-66-7, 2-Chloro-1,4-diaminobenzene 619-05-6, 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-Triamino-4-(1H)-pyrimidone 1630-11-1, 1,4-Diamino-3,5-diethylbenzene 1687-53-2, 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2043-61-0, Cyclohexanal 2359-52-6, 4-[Di(2-hydroxyethyl)amino]-2-methylaniline 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 2835-96-3, 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 2987-16-8, 3,3-Dimethylbutyraldehyde 3131-52-0, 5,6-Dihydroxyindole 4221-03-8, 5-Hydroxypentanal 4318-76-7, 2,5-Diaminopyridine 5306-96-7, 1,4-Diamino-2,3-dimethylbenzene 5349-76-8, 2,4-Diamino-1-methoxy-5-methylbenzene 5392-40-5 5435-64-3, 3,5,5-Trimethylhexanal 5697-02-9, 2-Methyl-1-naphthol-acetate 5862-80-6, 4-[(2,3-Dihydroxypropyl)amino]aniline 6265-21-0, 3-[(2-Hydroxyethyl)amino]aniline 6393-01-7, 1,4-Diamino-2,5-dimethylbenzene 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7218-02-2, 1,4-Diamino-2,6-dimethylbenzene 7228-00-4, 2-[(3-Hydroxyphenyl)amino]acetamide 7469-77-4, 2-Methyl-1-naphthol 7575-35-1, 4-[Di(2-hydroxyethyl)amino]aniline 7722-84-1, Hydrogen peroxide, biological studies 14268-66-7, 3,4-Methylene dioxyaniline

16251-77-7, 3-Phenylbutyraldehyde 16867-03-1, 2-Amino-3-hydroxypyridine
 17672-22-9, 2-Amino-6-methylphenol 26011-57-4, 6-Amino-3,4-dihydro-
 1,4(2H)-benzoxazine 26021-57-8, 3,4-Dihydro-6-hydroxy-1,4(2H)-
 benzoxazine 26455-21-0, N-(3-Dimethylaminophenyl)urea 28020-38-4,
 2,3-Diamino-6-methoxypyridine 29539-03-5, 5,6-Dihydroxyindoline
 29785-47-5, 4-Amino-2-(methoxymethyl)phenol 30897-75-7, Pinoacetaldehyde
 31906-04-4 36207-16-6 39489-79-7, 5-Amino-2,4-dichlorophenol
 45514-38-3, 4,5-Diamino-1-methyl-1H-pyrazole 53222-92-7,
 3-Amino-2-methylphenol 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-
 methylphenol 61693-42-3, 3-Amino-2,4-dichlorophenol 66566-48-1,
 4-[(2-Methoxyethyl)amino]aniline 67199-87-5, 1,4-Diamino-2-
 aminomethylbenzene 68039-49-6, 2,4-Dimethyl-3-cyclohexenecarboxaldehyde
 70643-19-5, 2,4-Diamino-1-(2-hydroxyethoxy)benzene 71077-37-7,
 1,3-Diamino-4-(2-methoxyethoxy)benzene 71500-41-9, 4-Amino-2-di[(2-
 hydroxyethyl)amino]-1-ethoxybenzene 71500-42-0, 3-[Di(2-
 hydroxyethyl)amino]aniline 73793-80-3, 1,4-Diamino-2-
 hydroxymethylbenzene 75513-65-4, 1,3-Diamino-4-(2,3-
 dihydroxypropoxy)benzene 76045-64-2, 3-[(2-Aminoethyl)amino]aniline
 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-methylaminobenzene 79352-72-0,
 4-Amino-2-(aminomethyl)phenol 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-
 2-methylphenol 80592-81-0, 3-[(2-Hydroxyethyl)amino]-2-methylphenol
 81329-90-0, 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxol 81892-72-0,
 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2-
 hydroxyethyl)amino]anisole 84540-47-6, 2,6-Dihydroxy-3,4-
 dimethylpyridine 84540-48-7, 2,4-Diaminophenoxy acetic acid
 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3,
 3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-
 hydroxyphenoxy)ethanol 90817-34-8 93841-24-8, 1,4-Diamino-2-(2-
 hydroxyethyl)benzene 94082-77-6, 2,4-Diamino-1,5-di(2-
 hydroxyethoxy)benzene 97902-52-8, 1,4-Diamino-2-(1-methylethyl)benzene
 104333-08-6, 4-Amino-2-(2-hydroxyethyl)phenol 104333-09-7,
 4-Amino-2-(hydroxymethyl)phenol 104752-48-9, 4-[(3-
 Hydroxypropyl)amino]aniline 104752-50-3, 1-(2-Aminoethoxy)-2,4-
 diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-dihydroxy-4-methylbenzene
 105293-89-8, 4-Dipropylaminoaniline 109942-17-8, 2,5-Diaminobiphenyl
 110102-86-8, 5-Amino-4-chloro-2-methylphenol 110952-46-0,
 4-Amino-2-[(2-hydroxyethyl)amino]methylphenol 111451-24-2,
 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4, 1,3-Diamino-2,4-
 dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-methylphenol
 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-dimethoxybenzene
 125109-85-5, 3-(3-Isopropylphenyl)butanal 126335-43-1,
 1,4-Diamino-2-(2-hydroxyethoxy)benzene 128729-30-6, 1,3-Bis[(4-
 aminophenyl)(2-hydroxyethyl)amino]-2-propanol 130582-53-5,
 1,4-Bis[(4-aminophenyl)amino]butane 137290-78-9, 5-Amino-4-methoxy-2-
 methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-4-methoxy-2-
 methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2,
 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-
 hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-
 methylbenzene 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol
 146658-65-3, 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6,
 2,6-Bis(2-hydroxyethyl)aminotoluene 155601-16-4, 4,5-Diamino-1-(1-
 methylethyl)-1H-pyrazole 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-
 pyrazole 157469-54-0, 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole
 157469-55-1, 1-[(4-Chlorophenyl)methyl]-4,5-diamino-1H-pyrazole
 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 168092-23-7,
 Di(2,4-diaminophenoxy)methane 168202-61-7, 4-Amino-3-
 (hydroxymethyl)phenol 207568-58-9, 2-[2-(Acetylamino)ethoxy]-1,4-
 diaminobenzene 207923-07-7, 5-Amino-2-ethylphenol 244104-61-8,

1,4-Diamino-2-(thiophen-2-yl)benzene 246244-41-7, 1,4-Diamino-2-(thiophen-3-yl)benzene 306959-12-6, 1,4-Diamino-2-(pyridin-3-yl)benzene 307493-94-3, 1,3-Diamino-4-(3-hydroxypropoxy)benzene 329320-36-7, 1,4-Diamino-2-(1-hydroxyethyl)benzene 337906-36-2, 1,4-Diamino-2-methoxymethylbenzene 364328-20-1

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative **hair dye compns.** containing aliphatic or **aromatic aldehydes** for enhancing color intensity and accelerating the dyeing process)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:859396 HCAPLUS

DN 139:341433

TI α -Dialdehydes and a Bronsted-acid ammonium **salt** for the dyeing of **hair** fibers

IN Plos, Gregory; Daubresse, Nicolas

PA L'Oreal, Fr.

SO Fr. Demande, 25 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2838961	A1	20031031	FR 2002-5186	20020425
	WO 2003090701	A1	20031106	WO 2003-EP5408	20030425
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	FR 2002-5186	A	20020425		
	US 2002-382632P	P	20020524		

OS MARPAT 139:341433

AB **Hair dye compns.** comprise α -dialdehydes and at least an ammonium **salt** of a Bronsted acid. Thus, a **composition** contained o-phthalaldehyde 0.4, NH₄OAc 1.3, and water qs to 100%.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST dialdehyde ammonium **salt** Bronsted acid **hair dye**

IT Carboxylic acids, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(ammonium **salts**; α -dialdehydes and Bronsted-acid ammonium **salts** for dyeing of **hair** fibers)

IT Surfactants

(anionic; α -dialdehydes and Bronsted-acid ammonium **salts** for dyeing of **hair** fibers)

IT **Dialdehydes**

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

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(aromatic; α -dialdehydes and Bronsted-acid ammonium salts for dyeing of hair fibers)

IT Hair preparations
(dyes; α -dialdehydes and Bronsted-acid ammonium salts for dyeing of hair fibers)

IT Sulfonic acids, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(salts; α -dialdehydes and Bronsted-acid ammonium salts for dyeing of hair fibers)

IT Bronsted acids
Dialdehydes
Phosphates, biological studies
Sulfates, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(α -dialdehydes and Bronsted-acid ammonium salts for dyeing of hair fibers)

IT 631-61-8, Ammonium acetate 643-79-8, o-Phthalaldehyde 643-79-8D, o-Phthalaldehyde, derivs. 932-41-2, 2,3-Thiophenedicarboxaldehyde 1066-33-7, Ammonium hydrogen carbonate 7149-49-7, 2,3-Naphthalenedicarboxaldehyde 7783-20-2, Ammonium sulfate, biological studies 10124-31-9, Ammonium phosphate 43073-12-7 76197-35-8, Anthracene-2,3-dialdehyde
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(α -dialdehydes and Bronsted-acid ammonium salts for dyeing of hair fibers)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 3 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:855880 HCAPLUS

DN 139:341432

TI Permanent hair dye **compsn.** containing aromatic diamines and peroxide conditioners in a two-compartment container

IN Birtwistle, David Howard; Branch, Mark Graham; Davies, Terence; Wu, Janice

PA Unilever N.V., Neth.; Unilever PLC; Hindustan Lever Limited

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003089330	A1	20031030	WO 2003-EP3242	20030327
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI EP 2002-252813 A 20020422

AB Disclosure is a permanent hair dye **composition** in a two compartment flexible walled container. The hair dye **composition** gradually dyes hair treated therewith on successive applications. The container

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comprises three layers of material which are completely peripherally sealed along the same peripheral seal thereby forming the two compartments, the middle layer having substantially uniform strength on those parts of its' surfaces which have contact with the two compartments. For example, an active color conditioner composed of phenylenediamine and aminophenol was sealed in one compartment of container, while the peroxide conditioner with hydrogen peroxide was in the other. The two parts were mixed just before use and left on the hair for two to ten minutes to have the hair colored.

- IC ICM B65D081-32
ICS A61K007-135
- CC 62-3 (Essential Oils and Cosmetics)
- IT **Ketones**, uses
RL: DEV (Device component use); USES (Uses)
(aliphatic; permanent **hair dye compns.** containing **aromatic** diamines and peroxide conditioners in two-compartment container)
- IT Amines, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(diamines, aromatic; permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT Hair preparations
(dyes; permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT Containers
(for hair dye; permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT Polyesters, uses
RL: DEV (Device component use); USES (Uses)
(metal **salts**; permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT Acrylic polymers, uses
Laminated plastics, uses
Polyamides, uses
Polyesters, uses
Polyesters, uses
Polyolefins
RL: DEV (Device component use); USES (Uses)
(permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT 7429-90-5, Aluminium, uses
RL: DEV (Device component use); USES (Uses)
(foil; permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT 9003-07-0, Polypropylene
RL: DEV (Device component use); USES (Uses)
(oriented; permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT 95-55-6, o-Aminophenol 106-50-3, p-Phenylene diamine, biological studies
108-46-3, Resorcinol, biological studies 1812-53-9, Dicetyldimonium chloride 7651-02-7, Stearamidopropyl dimethylamine 7722-84-1, Hydrogen peroxide, biological studies 27598-85-2, Aminophenol 54381-16-7, N,N-Bis(2-hydroxyethyl)-p-phenylene diamine sulfate
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)
- IT 9002-88-4 25038-59-9, Polyethylene terephthalate, uses 25038-59-9D, Polyethylene terephthalate, metal **salts** 25067-34-9,

Ethylene-vinyl alcohol copolymer

RL: DEV (Device component use); USES (Uses)

(permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)

IT 591-27-5, m-Aminophenol

RL: REM (Removal or disposal); PROC (Process)

(permanent hair dye **compns.** containing aromatic diamines and peroxide conditioners in two-compartment container)RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 4 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:300263 HCAPLUS

DN 138:308942

TI Substituted 2-aminoalkyl-1,4-diaminobenzene compounds and oxidation dye precursor **compositions** containing them

IN Chassot, Laurent; Braun, Hans-Juergen

PA Switz.

SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 692,971.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003070241	A1	20030417	US 2002-146264	20020515
	US 6436152	B1	20020820	US 2000-692971	20001020
	US 2002189033	A1	20021219	US 2002-124149	20020417
PRAI	DE 1999-19961272	A	19991218		
	US 2000-692971	A2	20001020		

OS MARPAT 138:308942

AB The oxidation hair dye precursor **composition**, in the form of a solution, cream, emulsion or gel, contains (i) 0.005-20.0% by weight of at least one coupler compound, and (ii) 0.005-20.0% by weight of at least one developer compound, that includes at least one substituted 2-aminoalkyl-1,4-diaminobenzene compound. The **composition** further comprises at least one direct dye. Preparation of substituted 2-aminoalkyl-1,4-diaminobenzene compds. is also described. For example, 1,4-diamino-2-(1-butylaminoethyl)benzene hydrochloride developer was prepared and formulated into an oxidation hair dye precursor **composition** with couplers 1,3-dihydroxybenzene, 1,3-diamino-4-(2-hydroxyethoxy)-benzene sulfate, 5-amino-2-methyl-phenol, or 1-naphthol to give bright light blond, gray-blue, purple, or gray-rose died hair colors, resp.

IC ICM A61K007-13

NCL 008405000; 008406000; 008415000

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 25

IT Hair preparations

(dyes, oxidative; oxidative hair dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

IT 90-15-3, 1-Naphthol 95-88-5, 1-Chloro-2,4-dihydroxybenzene 106-50-3, 1,4-Diaminobenzene, biological studies 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 533-31-3, 3,4-Methylenedioxyphenol 608-25-3, 2-Methyl-1,3-dihydroxybenzene 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 3-Methyl-4-aminophenol 5697-02-9, 1-Acetoxy-2-methylnaphthalene 6369-59-1, 2,5-Diaminotoluene sulfate 26455-21-0, N-(3-Dimethylamino)phenylurea 56216-28-5, 3,5-Diamino-2,6-dimethoxypyridine

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dihydrochloride 71005-35-1 74918-21-1, 1,3-Bis(2,4-diaminophenoxy)propane tetrahydrochloride 84540-50-1, 3-Amino-2-chloro-6-methylphenol 90817-34-8, 3-Amino-2-methylamino-6-methoxyppyridine 94158-14-2 135043-64-0, 4-Amino-2-aminomethylphenol dihydrochloride 159621-77-9 164919-03-3 217311-43-8, 2,4-Diamino-5-fluorotoluene sulfate 282542-32-9 350482-01-8 350482-02-9, 5-Amino-4-fluoro-2-methylphenol sulfate 364343-79-3
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative hair dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

IT 123-30-8, 4-Aminophenol 591-27-5, 3-Aminophenol
 RL: COS (Cosmetic use); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(oxidative hair dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

IT 350481-07-1P 350481-08-2P 350481-09-3P 350481-10-6P 350481-11-7P
 350481-13-9P 350481-15-1P 350481-16-2P 350481-17-3P 350481-18-4P
 350481-19-5P 350481-20-8P 350481-21-9P 350481-22-0P 350481-23-1P
 350481-24-2P 350481-25-3P 350481-26-4P 350481-27-5P 350481-29-7P
 350481-30-0P 350481-31-1P 350481-32-2P 350481-36-6P 350481-40-2P
 350481-41-3P 350481-43-5P 350481-44-6P 350481-45-7P 350481-46-8P
 350481-47-9P 350481-48-0P 350481-50-4P 350481-51-5P 350481-52-6P
 350481-53-7P 350481-54-8P 350481-56-0P 350481-57-1P 350481-58-2P
 350481-59-3P 350481-61-7P 350481-62-8P 350481-63-9P 350481-64-0P
 350481-65-1P 350481-66-2P 350481-67-3P 350481-69-5P 350481-70-8P
 350481-71-9P 350481-72-0P 350481-73-1P 350481-74-2P 350481-75-3P
 350481-76-4P 350481-77-5P 350481-78-6P 350481-79-7P 350481-80-0P
 350481-81-1P 350481-82-2P 350481-84-4P 350481-85-5P 350481-87-7P
 350481-88-8P 350481-89-9P 350481-90-2P 350481-91-3P 350481-92-4P
 350481-93-5P 350481-94-6P 350481-95-7P 350481-96-8P 350481-99-1P
 350482-00-7P 510774-40-0P 510774-41-1P 510774-42-2P 510774-43-3P
 510774-44-4P 510774-45-5P 510774-46-6P 510774-47-7P 510774-48-8P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxidative hair dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

IT 56-40-6, Glycine, reactions 62-53-3, Aniline, reactions 63-68-3, L-Methionine, reactions 68-12-2, Dimethylformamide, reactions 70-47-3, Asparagine, reactions 75-04-7, Ethylamine, reactions 75-31-0, Isopropylamine, reactions 95-85-2, 4-Chloro-2-aminophenol 96-20-8, 2-Amino-1-butanol 97-51-8, 2-Hydroxy-5-nitrobenzaldehyde 98-03-3, 2-Thiophenecarboxaldehyde 99-57-0, 2-Amino-4-nitrophenol 99-98-9, 4-Amino-N,N-dimethylaniline 100-10-7, 4-Dimethylaminobenzaldehyde 100-52-7, Benzaldehyde, reactions 104-86-9, 4-Chlorobenzylamine 106-47-8, 4-Chloroaniline, reactions 106-49-0, 4-Methylaniline, reactions 107-10-8, Propylamine, reactions 107-11-9, Allylamine 107-15-3, Ethylenediamine, reactions 108-00-9, 2-Dimethylaminoethylamine 109-01-3 109-55-7, 3-Dimethylaminopropylamine 109-83-1, 2-Methylaminoethanol 109-85-3, 2-Methoxyethylamine 110-58-7, Pentylamine 110-73-6, 2-Ethylaminoethanol 110-91-8, Morpholine, reactions 111-42-2, Diethanolamine, reactions 120-57-0, 3,4-Methylenedioxybenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 123-72-8, Butyraldehyde 123-75-1, Pyrrolidine, reactions 141-43-5, Ethanolamine, reactions 147-85-3, L-Proline, reactions 364-73-8, 1-Bromo-4-fluoro-3-nitrobenzene 364-74-9 364-76-1 437-83-2, 3-Fluoro-2-methoxyaniline 446-35-5 455-14-1, 4-Trifluoromethylaniline 498-62-4, 3-Thiophenecarboxaldehyde 498-63-5, Prolinol 500-22-1, Pyridine-3-carboxaldehyde 525-72-4,

1-Methyl-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline 536-21-0,
 1-(3-Hydroxyphenyl)-2-aminoethanol 536-90-3, 3-Methoxyaniline
 555-16-8, 4-Nitrobenzaldehyde, reactions 587-04-2, 3-Chlorobenzaldehyde
 590-86-3 616-30-8 617-89-0, Furfurylamine 765-30-0, Cyclopropylamine
 872-85-5, Pyridine-4-carboxaldehyde 1001-53-2, N-Acetyleneethylenediamine
 1117-97-1, O,N-Dimethylhydroxylamine 1121-60-4, Pyridin-2-carboxaldehyde
 1493-27-2, 1-Fluoro-2-nitrobenzene 2038-03-1, 4-Morpholineethanamine
 2043-61-0, Cyclohexanecarboxaldehyde 2454-37-7, 3-(1-Hydroxyethyl)aniline
 2516-47-4, Aminomethylcyclopropane 2812-47-7, Prolinamide
 2835-95-2, 3-Amino-6-methylphenol 3731-51-9, 2-Picolylamine
 3731-53-1, 4-Picolylamine 4214-76-0, 2-Amino-5-nitropyridine
 4795-29-3, Tetrahydrofurfurylamine 5036-48-6, 1-(3-Aminopropyl)imidazole
 5382-16-1, 4-Hydroxypiperidine 5616-32-0, Methylaminoacetonitrile
 6168-72-5, 2-Aminopropanol 6291-85-6, 3-Ethoxypropylamine
 6315-89-5, 3,4-Dimethoxyaniline 6859-99-0, 3-Hydroxypiperidine
 6921-22-8 7304-32-7, 2-Fluoro-5-nitrobenzoic acid 7663-77-6,
 1-(3-Aminopropyl)-2-pyrrolidone 13325-10-5, 4-Aminobutanol
 14268-66-7, 3,4-Methylenedioxyaniline 24424-99-5, Di(tert-butyl dicarbonate)
 25739-59-7 35303-76-5, 4-(2-Aminoethyl)benzenesulfonamide
 40499-83-0, 3-Hydroxypyrrolidine **51980-54-2**, 4-Pyrrolidinobenzaldehyde
 68621-88-5 71026-66-9 244104-65-2 325953-40-0 325953-41-1
 325953-45-5 325953-46-6 325953-48-8 510774-39-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative **hair** dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

IT 325953-36-4P 350481-97-9P 350481-98-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

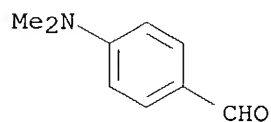
(oxidative hair dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

IT **100-10-7**, 4-Dimethylaminobenzaldehyde **51980-54-2**, 4-Pyrrolidinobenzaldehyde

RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative **hair** dye precursor **compns.** containing substituted aminoalkyl diaminobenzene compds. developers)

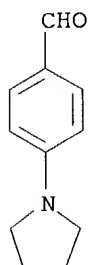
RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 51980-54-2 HCAPLUS

CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



L69 ANSWER 5 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:278305 HCAPLUS

DN 138:308932

TI **Hair** dyes containing **aromatic** or heteroaromatic
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers

IN Moeller, Hinrich; Oberkobusch, Doris

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 20 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10148847	A1	20030410	DE 2001-10148847	20011004
	WO 2003030845	A1	20030417	WO 2002-EP10730	20020925
	W: AU, BR, CA, CN, HU, JP, NO, PL, RU, US, VN				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				

PRAI DE 2001-10148847 A 20011004

OS MARPAT 138:308932

AB The invention concerns **hair** dyes that contain **aromatic** or
heteroarom. **aldehydes** and **ketones** and
4-aminopyrazoline-5-one derivs. Further components are selected from the
group of primary and secondary aromatic amines, hydroxydes, nitrogen-containing
heterocycles, amino acids etc. Thus in a dyeing experiment 5 mmol
4-formyl-1-methylpyridinium benzene sulfonate and 5 mmol 4-aminoantipyrine
were mixed and pH 6 was set with sodium hydroxide; an intensive
gold-yellow color was obtained.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST **hair** dye **arom** heteroarom **aldehyde**
ketone aminoantipyrine

IT Surfactants

(anionic; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)

IT **Aldehydes**, biological studies

Ketones, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**aromatic**; **hair** dyes containing **aromatic** or
heteroarom. **aldehydes** and **ketones** in
combination with other dyes and color intensifiers)

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

- IT **Hair preparations**
(dyes; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT Oxidizing agents
(**hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT **Aldehydes**, biological studies
Amines, biological studies
Caseins, biological studies
Collagens, biological studies
Elastins
Keratins
Ketones, biological studies
Proteins
Quaternary ammonium compounds, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT **Ketones**, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(heteroarom.; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT **Aldehydes**, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(heteroaryl; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT Surfactants
(nonionic; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT Proteins
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(soybean; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
other dyes and color intensifiers)
- IT Protein hydrolyzates
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(wheat gluten; **hair** dyes containing **aromatic** or
heteroarom. **aldehydes** and **ketones** in
combination with other dyes and color intensifiers)
- IT Glutens
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(wheat, hydrolyzates; **hair** dyes containing **aromatic** or
heteroarom. **aldehydes** and **ketones** in
combination with other dyes and color intensifiers)
- IT Surfactants
(zwitterionic; **hair** dyes containing **aromatic** or
heteroarom. **aldehydes** and **ketones** in
combination with other dyes and color intensifiers)
- IT 56-87-1, L-Lysine, biological studies 59-48-3, Oxindol 59-92-7,
biological studies 60-18-4, L-Tyrosine, biological studies 62-53-3,
Benzenamine, biological studies 63-91-2, L-Phenylalanine, biological
studies 65-49-6 66-72-8, Pyridoxal 67-52-7, Barbituric acid

70-18-8, Glutathione, biological studies 70-26-8, L-Ornithine 70-70-2
 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophan,
 biological studies 74-79-3, L-Arginine, biological studies 77-32-7
 82-86-0, Acenaphthylenequinone 83-07-8 83-30-7 83-33-0 83-56-7,
 1,5-Naphthalenediol **84-83-3** 85-26-7, Salicil 87-02-5
 87-66-1, Pyrogallol 88-21-1 88-74-4 89-57-6 89-84-9 89-86-1
 90-02-8, Salicylaldehyde, biological studies 90-05-1 90-15-3,
 1-Naphthalenol 90-20-0 90-44-8, Anthrone 91-29-2 91-56-5,
 1H-Indole-2,3-dione 92-44-4, 2,3-Naphthalenediol 92-65-9 93-55-0,
 Propiophenone 95-01-2, **2,4-Dihydroxybenzaldehyde** 95-54-5,
 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5
 96-91-3 96-93-5 97-51-8 98-01-1, 2-Furancarboxaldehyde, biological
 studies 98-37-3 98-86-2, Acetophenone, biological studies 99-05-8
 99-07-0 99-31-0 99-50-3 99-56-9 99-61-6 99-92-3 99-93-4,
 4-Hydroxyacetophenone 100-01-6, biological studies **100-10-7**,
4-Dimethylaminobenzaldehyde 101-77-9 101-80-4 102-32-9
 106-50-3, 1,4-Benzenediamine, biological studies 107-95-9,
 β -Alanine 108-45-2, 1,3-Benzenediamine, biological studies
 108-46-3, 1,3-Benzenediol, biological studies 108-72-5,
 1,3,5-Benzenetriamine 108-73-6, Phloroglucin 109-00-2, 3-Pyridinol
 110-85-0, Piperazidine, biological studies 110-86-1, Pyridine,
 biological studies 110-89-4, Piperidine, biological studies 116-63-2
 117-39-5, Quercetin 118-12-7 118-70-7, 4,5,6-Pyrimidinetriamine
 118-92-3 118-93-4 119-34-6 119-59-5 119-61-9, Benzophenone,
 biological studies 119-70-0 119-72-2 **120-21-8**, 4-
Diethylaminobenzaldehyde 120-46-7 120-80-9, Pyrocatechin,
 biological studies 121-33-5, Vanillin 121-47-1 121-57-3 121-71-1
 122-57-6 123-30-8 123-31-9, Hydroquinone, biological studies
 123-75-1, Pyrrolidine, biological studies 131-56-6, 2,4-
 DiHydroxyBenzophenone 134-81-6, Benzil 139-65-1 141-84-4 141-86-6,
 2,6-Pyridinediamine 142-08-5, 2(1H)-Pyridinone 147-85-3, L-Proline,
 biological studies 149-87-1 149-91-7, biological studies 150-13-0
 150-19-6 150-75-4 150-76-5 156-81-0, 2,4-Pyrimidinediamine
 288-13-1, 1H-Pyrazole 288-32-4, 1H-Imidazole, biological studies
 288-88-0, 1H-1,2,4-Triazole 326-91-0 350-03-8 452-58-4,
 2,3-Pyridinediamine 458-36-6, **Coniferylaldehyde** 462-08-8,
 3-Pyridinamine 480-66-0 486-25-9, 9-Fluorenone **487-89-8**,
 1H-Indole-3-**carboxaldehyde** 488-87-9 490-78-8 491-38-3,
 Chromone 491-67-8, 5,6,7-TriHydroxyFlavone 492-73-9, 2,2'-Pyridil
 492-94-4, 2,2'-Furil 498-02-2 498-94-2, Piperidine 4-carboxylic acid
 498-95-3, Piperidine 3-carboxylic acid 500-22-1, 3-
Pyridinecarboxaldehyde 504-17-6, Thiobarbituric acid 504-24-5,
 4-Pyridinamine 504-29-0, 2-Pyridinamine 517-22-6 520-36-5,
 4',5,7-TriHydroxyFlavone 525-82-6, Flavone 528-21-2 533-31-3,
 1,3-Benzodioxol-5-ol 533-73-3, Hydroxyhydroquinone 535-75-1,
 Piperidine 2-carboxylic acid 535-87-5 537-65-5 548-83-4,
 3,5,7-TriHydroxyFlavone 552-89-6 553-86-6, Cumarone 555-16-8,
 biological studies 556-03-6, Tyrosine 570-24-1 574-19-6 577-56-0
 577-85-5, 3-HydroxyFlavone 578-66-5, 8-**Quinolinamine**
579-72-6 580-17-6, 3-**Quinolinamine** 580-22-3, 2-
Quinolinamine 582-17-2, 2,7-Naphthalenediol 586-89-0
 591-27-5 603-81-6 606-23-5, 1H-Indene-1,3(2H)-dione 606-31-5
 606-55-3 606-57-5 608-08-2, 3-Indoxyl acetate 610-74-2 610-81-1
 611-03-0 611-09-6 611-98-3 611-99-4, 4,4'-DiHydroxyBenzophenone
 614-82-4 615-66-7 615-71-4, 1,2,4-Benzenetriamine 616-45-5,
 2-Pyrrolidinone 616-47-7 619-05-6 623-09-6 623-30-3 626-64-2,
 4-Pyridinol 636-25-9 698-63-5, biological studies 699-83-2
 703-80-0 704-13-2 711-79-5 712-97-0 771-50-6, 1H-Indole-3-

carboxylic acid 779-90-8 830-74-0 832-58-6, 2,4,6-
 Trimethoxyacetophenone 872-85-5, 4-Pyridinecarboxaldehyde
 932-16-1 934-22-5, 1H-Benzimidazol-5-amine 943-88-4 950-81-2
 1004-74-6, Pyrimidinetetramine 1009-61-6 1080-12-2 1121-60-4, 2-
Pyridinecarboxaldehyde 1122-54-9 1122-62-9 1123-55-3,
 7-Benzothiazolamine 1123-93-9, 5-Benzothiazolamine 1125-60-6, 5-
Isoquinolinamine 1136-86-3 1137-42-4, 4-HydroxyBenzophenone
 1143-38-0, 1,8-DihydroxyAnthrone 1143-72-2, 2,3,4-TriHydroxyBenzophenone
 1192-58-1 1197-55-3 **1199-59-3 1204-86-0**, 4-
Morpholinobenzaldehyde 1226-42-2, Anisil **1424-66-4**
 1450-75-5 1455-77-2, 1H-1,2,4-Triazole-3,5-diamine 1466-88-2
 1470-79-7, 2,4,4'-TriHydroxyBenzophenone 1483-97-2 1484-05-5
 1504-76-3 1571-72-8 1643-19-2 1734-79-8 1820-80-0,
 1H-Pyrazol-3-amine 1874-22-2 1953-54-4, 1H-Indol-5-ol
1971-81-9 2058-74-4 **2124-31-4** 2291-40-9 2374-03-0
 2380-84-9, 1H-Indol-7-ol 2380-86-1, 1H-Indol-6-ol 2380-94-1,
 1H-Indol-4-ol 2478-38-8 2510-01-2
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyes containing aromatic or heteroarom.

aldehydes and ketones in combination with
 other dyes and color intensifiers)

IT 2654-52-6 2785-06-0 2835-77-0, 2-AminoBenzophenone 2835-95-2
 2835-99-6 2871-01-4 2887-61-8, 2-Hydroxybutyrophenone 3011-34-5
 3131-52-0, 1H-Indole-5,6-diol 3158-63-2, 1,3-DimethylThiobarbituric acid
 3160-35-8 3160-37-0 3167-49-5 3215-37-0 3342-78-7 3433-54-3
 3565-42-2, Quinisatin 3769-62-8, Gallion 3855-78-5 **4181-05-9**
 4318-76-7, 2,5-Pyridinediamine 4331-29-7, 1H-Benzimidazol-4-amine
 4335-90-4 4363-93-3, 4-**Quinolinecarboxaldehyde** 4506-66-5
 4928-43-2 4940-39-0 5007-67-0 5099-39-8 5131-58-8 5142-72-3
 5142-73-4 5192-03-0, 1H-Indol-5-amine 5192-04-1, 1H-Indol-7-amine
 5192-23-4, 1H-Indol-4-amine 5217-47-0, 1,3-DiethylThiobarbituric acid
 5274-70-4 5307-14-2 5318-27-4, 1H-Indol-6-amine 5345-47-1
 5416-80-8 5418-63-3 5432-53-1 5434-20-8 5551-11-1 5650-40-8,
 2-Hydroxypropiofenone 5650-41-9, 3-Hydroxypropiofenone 5679-13-0
 5682-83-7 5718-83-2 5850-35-1, Acid blue 29 5910-23-6 5930-28-9
 5959-52-4 6051-53-2 6201-65-6 **6203-18-5** 6222-46-4
 6247-27-4, Mordant brown 4 6259-50-3 6322-56-1 6327-79-3 6358-09-4
 6361-22-4 6399-72-0 6628-04-2 6628-86-0 6633-46-1 6634-82-8
 6635-20-7 6781-42-6 6967-12-0, 1H-Indazol-6-amine 7313-70-4
 7336-20-1 7411-49-6 7426-56-4 7427-04-5 **7570-45-8**
 7575-35-1 7722-84-1, Hydrogen peroxide, biological studies 7749-47-5
 7768-28-7 7770-45-8 **10040-98-9** 10041-06-2 10111-08-7,
 1H-Imidazole-2-carboxaldehyde 10173-66-7 10182-90-8D,
salts of 10338-57-5, 4-Piperidinobenzaldehyde
 10342-85-5 10472-94-3 10472-95-4 13441-40-2D, **salts of**
 13505-39-0, 3-Hydroxybutyrophenone 13558-26-4 13558-27-5 13558-57-1
 13669-42-6, 3-**Quinolinecarboxaldehyde** 13754-19-3,
 4,5-Pyrimidinediamine 14189-80-1 14189-81-2 14268-66-7,
 1,3-Benzodioxol-5-amine 14338-36-4 14501-66-7 16082-33-0,
 1H-Pyrazole-3,5-diamine 16588-34-4 16634-88-1 16859-86-2
 16867-03-1 17028-61-4 17422-74-1 17630-76-1 17792-58-4
 18073-18-2 18899-16-6D, **salts of** 19005-93-7, 1H-Indole-2-
carboxaldehyde 19012-02-3 **19012-03-4** 19335-11-6,
 1H-Indazol-5-amine 20103-09-7 20357-25-9 20427-81-0 21240-56-2
 22411-59-2 22715-34-0 22948-94-3 23244-87-3, 2,4,5-Pyridinetriamine
 23894-07-7 24119-24-2 24905-87-1, HC red 7 25128-32-9 27394-81-6
 28020-38-4 28491-52-3 29539-03-5 29705-39-3 31680-07-6
 31835-64-0 32387-21-6 33709-29-4 **33985-71-6** 36075-79-3D,

salts of 39755-03-8, 4-Hydroxybutyrophenone 39755-95-8
 39910-98-0 **41602-56-6**, 4-Dimethylamino-2-
hydroxybenzaldehyde 41927-50-8 41946-53-6 42426-35-7
 42454-06-8 42758-54-3 42952-29-4 45791-64-8D, salts of
 46061-36-3D, salts of 46791-37-1D, salts of
 46881-39-4D, salts of 46893-92-9D, salts of
 50610-28-1 50899-59-7 51387-92-9 **51980-54-2**, 4-
Pyrrolidinobenzaldehyde 53055-05-3 54628-24-9D, salts
 of 55047-63-7 55198-95-3 55302-96-0 55949-38-7D, Pyrimidinol,
 derivs. 56932-44-6, HC yellow 5 **58028-76-5** 58480-17-4
 60159-98-0 61078-47-5 61078-48-6 61224-35-9 61693-42-3
 62077-85-4D, salts of 62378-72-7 62496-02-0 63053-27-0
63149-33-7 64993-07-3 65443-86-9 66566-48-1 66635-40-3
 67019-57-2 67805-13-4 68391-32-2 69386-65-8 69537-53-7D,
 salts of 69825-83-8 70484-29-6 70643-19-5 71134-97-9
 73264-13-8D, salts of 74918-21-1 74991-01-8D, salts
 of 75722-39-3D, salts of 77484-77-6 77523-60-5D,
 salts of 78521-11-6D, salts of 79352-72-0
 81859-24-7, Polyquaternium 10 82228-89-5 82576-75-8, HC violet 1
 83073-86-3 83763-47-7 84540-47-6 84540-50-1 **84562-48-1**
 85679-78-3 85926-99-4 87814-15-1 **90134-10-4** 90293-76-8D,
 derivs. 91921-13-0D, salts of 93841-24-8 93923-57-0
 95195-42-9, 4,4'-Pyridil 95576-89-9, HC red 10 96516-29-9
 104333-09-7 110102-86-8 110952-48-2 114402-54-9 114682-26-7
 115423-86-4 117907-43-4 122438-74-8D, salts of 128729-30-6
 130133-55-0 130582-56-8 137290-86-9 144644-13-3 147025-37-4D,
 salts of 149833-00-1D, salts of 155601-17-5
 159661-42-4 187030-52-0

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in combination with
 other dyes and color intensifiers)

IT 202525-71-1 202525-73-3 202525-74-4 202525-75-5 202525-76-6
 202525-78-8 215377-52-9 215517-65-0 215517-66-1 215517-68-3
 220118-56-9 223397-50-0D, salts of 223397-66-8D,
 salts of 223397-83-9D, salts of 223397-92-0D,
 salts of 223398-02-5 223398-35-4D, salts of
 223398-44-5D, salts of 260980-91-4 260980-95-8 260980-96-9
 260980-97-0 260980-98-1 260980-99-2 260981-00-8 278807-62-8D,
 salts of 278807-63-9D, salts of 278807-64-0D,
 salts of 278807-65-1D, salts of 278807-66-2D,
 salts of 278807-67-3D, salts of 278807-68-4D,
 salts of 278807-69-5D, salts of 278807-70-8D,
 salts of 278807-71-9D, salts of 278807-72-0D,
 salts of 278807-73-1D, salts of 278807-74-2D,
 salts of 278807-75-3D, salts of 278807-76-4D,
 salts of 278807-77-5D, salts of 278807-78-6D,
 salts of 278807-79-7D, salts of 278807-80-0D,
 salts of 279214-38-9 279218-88-1D, salts of
 279218-90-5D, salts of 279218-92-7D, salts of
 279218-94-9D, salts of 279218-98-3D, salts of
 279219-00-0D, salts of 279219-03-3D, salts of
 279219-07-7D, salts of 279219-13-5D, salts of
 279219-17-9D, salts of 279219-21-5D, salts of
 279219-24-8D, salts of 279219-31-7D, salts of
 324757-53-1D, salts of 324757-56-4D, salts of
 324757-57-5D, salts of 324757-59-7D, salts of
 324757-60-0D, salts of 324757-63-3 324757-64-4

325958-39-2D, **salts** of 325958-40-5D, **salts** of
 325958-41-6D, **salts** of 325958-42-7D, **salts** of
 325958-43-8D, **salts** of 325958-44-9D, **salts** of
 346593-13-3 381211-42-3 381212-15-3 503853-94-9 503854-25-9D,
salts of 503854-51-1D, **salts** of 503854-53-3D,
salts of 503854-79-3D, **salts** of 503854-80-6D,
salts of 503854-82-8D, **salts** of 503854-83-9D,
salts of 503854-84-0D, **salts** of 503854-85-1D,
salts of 503854-87-3D, **salts** of 503854-88-4D,
salts of 503854-89-5D, **salts** of 503854-90-8D,
salts of 503854-91-9D, **salts** of 503854-92-0D,
salts of 503854-93-1D, **salts** of 503854-95-3D,
salts of 503854-98-6D, **salts** of 503855-00-3D,
salts of 503855-01-4D, **salts** of 503855-03-6D,
salts of 503855-05-8D, **salts** of 503855-07-0D,
salts of 503855-09-2D, **salts** of 503855-11-6D,
salts of 504433-02-7 507244-55-5 507244-59-9 507244-64-6
 507244-68-0 507244-82-8 507244-90-8 507245-01-4 507245-40-1
 507245-44-5 507245-49-0 507245-54-7 507246-12-0

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in combination with
 other dyes and color intensifiers)

IT 84-83-3 100-10-7, 4-Dimethylaminobenzaldehyde
 120-21-8, 4-Diethylaminobenzaldehyde 487-89-8,
 1H-Indole-3-carboxaldehyde 579-72-6 1199-59-3
 1204-86-0, 4-Morpholinobenzaldehyde 1424-66-4
 1971-81-9 2124-31-4 4181-05-9
 6203-18-5 7570-45-8 10040-98-9
 10338-57-5, 4-Piperidinobenzaldehyde 19012-03-4
 33985-71-6 41602-56-6, 4-Dimethylamino-2-
 hydroxybenzaldehyde 51980-54-2, 4-
 Pyrrolidinobenzaldehyde 58028-76-5 63149-33-7
 84562-48-1 90134-10-4

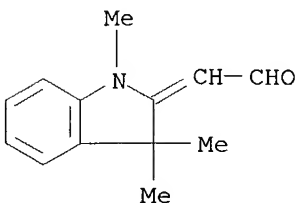
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in combination with
 other dyes and color intensifiers)

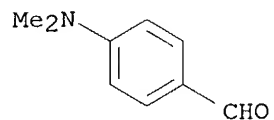
RN 84-83-3 HCAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA
 INDEX NAME)

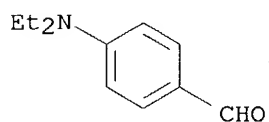


RN 100-10-7 HCAPLUS

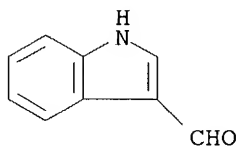
CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



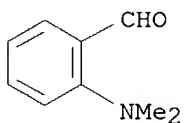
RN 120-21-8 HCAPLUS
CN Benzaldehyde, 4-(diethylamino)- (9CI) (CA INDEX NAME)



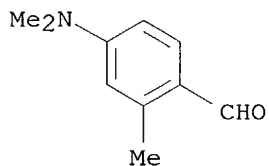
RN 487-89-8 HCAPLUS
CN 1H-Indole-3-carboxaldehyde (9CI) (CA INDEX NAME)



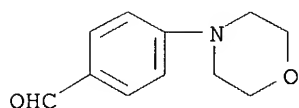
RN 579-72-6 HCAPLUS
CN Benzaldehyde, 2-(dimethylamino)- (9CI) (CA INDEX NAME)



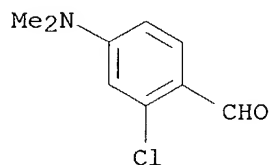
RN 1199-59-3 HCAPLUS
CN Benzaldehyde, 4-(dimethylamino)-2-methyl- (9CI) (CA INDEX NAME)



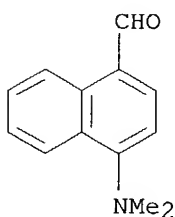
RN 1204-86-0 HCAPLUS
CN Benzaldehyde, 4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



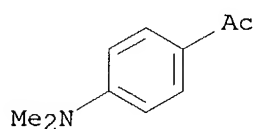
RN 1424-66-4 HCAPLUS
CN Benzaldehyde, 2-chloro-4-(dimethylamino)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



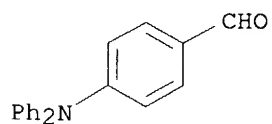
RN 1971-81-9 HCAPLUS
CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



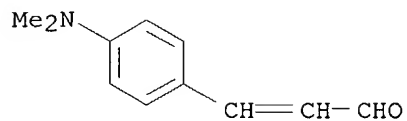
RN 2124-31-4 HCAPLUS
CN Ethanone, 1-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 4181-05-9 HCAPLUS
CN Benzaldehyde, 4-(diphenylamino)- (9CI) (CA INDEX NAME)

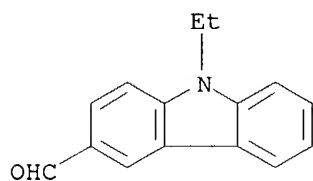


RN 6203-18-5 HCAPLUS
CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



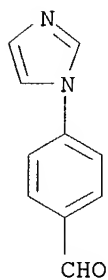
RN 7570-45-8 HCAPLUS

CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



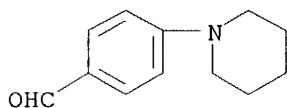
RN 10040-98-9 HCAPLUS

CN Benzaldehyde, 4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



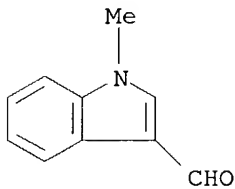
RN 10338-57-5 HCAPLUS

CN Benzaldehyde, 4-(1-piperidiny1)- (9CI) (CA INDEX NAME)

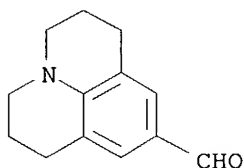


RN 19012-03-4 HCAPLUS

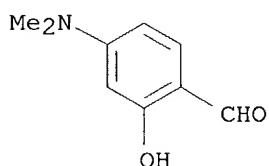
CN 1H-Indole-3-carboxaldehyde, 1-methyl- (9CI) (CA INDEX NAME)



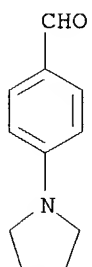
RN 33985-71-6 HCAPLUS
CN 1H,5H-Benzo[ij]quinolizine-9-carboxaldehyde, 2,3,6,7-tetrahydro- (6CI, 8CI, 9CI) (CA INDEX NAME)



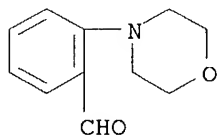
RN 41602-56-6 HCAPLUS
CN Benzaldehyde, 4-(dimethylamino)-2-hydroxy- (9CI) (CA INDEX NAME)



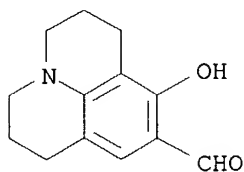
RN 51980-54-2 HCAPLUS
CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



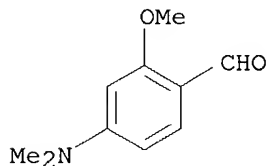
RN 58028-76-5 HCAPLUS
CN Benzaldehyde, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)



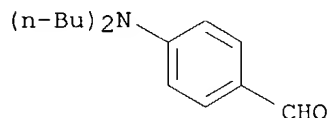
RN 63149-33-7 HCAPLUS
CN 1H,5H-Benzo[ij]quinolizine-9-carboxaldehyde, 2,3,6,7-tetrahydro-8-hydroxy- (9CI) (CA INDEX NAME)



RN 84562-48-1 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



RN 90134-10-4 HCAPLUS
 CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)



L69 ANSWER 6 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:278301 HCAPLUS

DN 138:292386

TI **Hair** dyes containing **aromatic** or heteroaromatic
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivatives, other dyes and color intensifiers

IN Moeller, Hinrich; Oberkobusch, Doris

PA Henkel K.-G.a.A., Germany

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10148841	A1	20030410	DE 2001-10148841	20011004
	WO 2003030842	A1	20030417	WO 2002-EP10734	20020925
	W: AU, BR, CA, CN, HU, JP, NO, PL, RU, US, VN				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
PRAI	DE 2001-10148841	A	20011004		
OS	MARPAT 138:292386				
AB	The invention concerns hair dyes that contain aromatic or heteroarom. aldehydes and ketones , 1-acylindoline-3-one derivs., other dyes and color intensifiers. The components are selected from the group of primary and secondary aromatic				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

amines, hydroxydes, nitrogen-containing heterocycles, amino acids etc. Thus in a dyeing experiment 5 mmol 4-formyl-1-methylquinolinium-p-toluene sulfonate and 5 mmol 1-acetylindoline-3-one were mixed and pH 6 was set; an intensive red-violet color was obtained.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST **hair dye arom heteroarom aldehyde**

ketone acylindoline one

IT Proteins

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(almond; **hair** dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in **combination** with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT Surfactants

(anionic; **hair** dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in **combination** with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT **Aldehydes**, biological studies

Ketones, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**aromatic**; **hair** dyes containing **aromatic** or

heteroarom. **aldehydes** and **ketones** in

combination with 1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT Dyes

(direct; **hair** dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in **combination** with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT **Hair preparations**

(dyes, oxidative; **hair** dyes containing **aromatic** or

heteroarom. **aldehydes** and **ketones** in

combination with 1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT **Hair preparations**

(dyes; **hair** dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in **combination** with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT Oxidizing agents

(**hair** dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in **combination** with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT **Aldehydes**, biological studies

Amines, biological studies

Carbonyl compounds (organic), biological studies

Caseins, biological studies

Collagens, biological studies

Collagens, biological studies

Elastins

Elastins

Glutens

Keratins

Ketones, biological studies

Quaternary ammonium compounds, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**hair** dyes containing **aromatic** or heteroarom.

aldehydes and **ketones** in **combination** with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT **Ketones**, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (heteroarom.; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT **Aldehydes**, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (heteroaryl; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT Surfactants
 (nonionic; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT Peptides, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oligopeptides; **hair** dyes containing **aromatic** or
 heteroarom. **aldehydes** and **ketones** in
combination with 1-acylindoline-3-one derivs., other dyes and
 color intensifiers)

IT Proteins
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (soybean; **hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT Surfactants
 (zwitterionic; **hair** dyes containing **aromatic** or
 heteroarom. **aldehydes** and **ketones** in
combination with 1-acylindoline-3-one derivs., other dyes and
 color intensifiers)

IT 51-92-3D, Tetramethylammonium, **salts** 59-48-3 59-92-7,
 biological studies 60-18-4, L-Tyrosine, biological studies 60-32-2
 62-53-3, Benzenamine, biological studies 63-91-2, L-Phenylalanine,
 biological studies 65-49-6 66-40-0D, Tetraethylammonium, **salts**
 66-72-8 67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione 70-18-8, Glutathion,
 biological studies 70-26-8, L-Ornithine 70-70-2 71-00-1,
 L-Histidine, biological studies 71-47-6D, Formate, derivs. 71-50-1D,
 Acetate, **salts** 72-03-7D, Propionate, **salts**
 73-22-3, L-Tryptophan, biological studies 74-79-3, L-Arginine,
 biological studies 83-07-8 83-30-7 83-33-0 83-56-7,
 1,5-Naphthalenediol **84-83-3** 87-02-5 87-66-1,
 1,2,3-Benzenetriol 88-21-1 88-74-4 89-57-6 89-84-9 89-86-1
 90-02-8, biological studies 90-05-1 90-15-3, 1-Naphthalenol 90-20-0
 90-44-8, 9(10H)-Anthracenone 91-29-2 91-56-5, 1H-Indole-2,3-dione
 91-95-2, [1,1'-Biphenyl]-3,3',4,4'-tetramine 92-44-4,
 2,3-Naphthalenediol 93-05-0 93-55-0 95-01-2 95-54-5,
 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5
 96-91-3 96-93-5 97-51-8 98-01-1, 2-Furancarboxaldehyde, biological
 studies 98-37-3 98-86-2, biological studies 99-05-8 99-07-0
 99-31-0 99-50-3 99-56-9 99-61-6 99-92-3 99-93-4 99-98-9
 100-01-6, biological studies **100-10-7** 101-54-2 101-77-9
 101-80-4 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies
 107-95-9, . β -Alanine 108-45-2, 1,3-Benzenediamine, biological
 studies 108-46-3, 1,3-Benzenediol, biological studies 108-72-5,
 1,3,5-Benzenetriamine 108-73-6, 1,3,5-Benzenetriol 113-21-3D, Lactate,
salts 116-63-2 117-39-5 118-12-7 118-70-7,
 4,5,6-Pyrimidinetriamine 118-92-3 118-93-4 119-34-6 119-59-5
 119-61-9, biological studies 119-70-0 **120-21-8** 120-46-7
 120-72-9, 1H-Indole, biological studies 120-72-9D, 1H-Indole, derivs.

120-80-9, 1,2-Benzenediol, biological studies 121-33-5 121-47-1
 121-57-3 121-71-1 123-30-8 123-31-9, 1,4-Benzenediol, biological
 studies 126-44-3D, Citrate, **salts** 131-56-6 134-81-6,
 Benzil 139-65-1 141-84-4 141-86-6, 2,6-Pyridinediamine 142-62-1D,
 Hexanoic acid, **salts** 147-85-3, L-Proline, biological studies
 149-91-7, biological studies 150-13-0 150-19-6 150-75-4 150-76-5
 156-81-0, 2,4-Pyrimidinediamine 288-88-0, 1H-1,2,4-Triazole 326-91-0
 350-03-8 366-18-7, 2,2'-Bipyridine 452-58-4, 2,3-Pyridinediamine
 458-36-6 461-55-2D, Butyrate, **salts** 462-08-8, 3-Pyridinamine
 480-66-0 486-25-9, 9H-Fluoren-9-one 487-48-9 **487-89-8**,
 1H-Indole-3-**carboxaldehyde** 488-87-9 490-78-8 491-38-3,
 4H-1-Benzopyran-4-one 491-67-8 492-94-4 492-97-7, 2,2'-Bithiophene
 496-73-1 498-02-2 500-22-1, 3-**Pyridinecarboxaldehyde**
 500-85-6D, Indophenol, derivs. 504-15-4 504-17-6 504-24-5,
 4-Pyridinamine 504-29-0, 2-Pyridinamine 520-36-5 523-88-6 525-82-6
 528-21-2 528-75-6 533-31-3, 1,3-Benzodioxol-5-ol 533-73-3,
 1,2,4-Benzenetriol 535-87-5 537-65-5 548-83-4 552-89-6 553-26-4,
 4,4'-Bipyridine 553-86-6, 2(3H)-Benzofuranone 555-16-8, biological
 studies 570-24-1 574-19-6 577-56-0 577-85-5 578-66-5, 8-
Quinolinamine 579-07-7 580-17-6, 3-**Quinolinamine**
 580-22-3, 2-**Quinolinamine** 582-17-2, 2,7-Naphthalenediol
 586-89-0 591-27-5 603-81-6 606-23-5, 1H-Indene-1,3(2H)-dione
 606-31-5 606-57-5 608-08-2 608-25-3 608-59-3D, Gluconate,
salts 608-97-9, Benzenepentamine 609-20-1 610-74-2
 610-81-1 610-99-1 611-03-0 611-09-6 611-98-3 611-99-4 614-16-4
 615-66-7 615-71-4, 1,2,4-Benzenetriamine 619-05-6 621-96-5
 623-30-3 636-25-9 698-63-5, biological studies 699-83-2 703-80-0
 704-13-2 711-79-5 712-61-8 712-97-0 779-90-8 832-58-6 873-74-5
 876-87-9 932-16-1 934-22-5, 1H-Benzimidazol-5-amine 950-81-2
 1004-74-6, Pyrimidinetetramine 1004-75-7 1009-61-6 1080-74-6
 1121-60-4, 2-**Pyridinecarboxaldehyde** 1122-54-9 1122-62-9
 1123-55-3, 7-Benzothiazolamine 1123-93-9, 5-Benzothiazolamine
 1125-60-6, 5-**Isoquinolinamine** 1136-86-3 1137-42-4
 1143-38-0 1143-72-2 1192-58-1 1197-55-3 **1199-59-3**
1204-86-0 1217-89-6 1226-42-2 **1424-66-4** 1450-75-5
 1455-77-2, 1H-1,2,4-Triazole-3,5-diamine 1466-88-2 1470-79-7
 1483-97-2 1484-05-5 1504-76-3 1571-72-8 1734-79-8 1820-80-0,
 1H-Pyrazol-3-amine 1874-22-2 2058-74-4 **2124-31-4** 2291-40-9
 2374-03-0 2431-00-7 2460-59-5 2478-38-8
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyes containing aromatic or heteroarom.
 aldehydes and ketones in combination with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)
 IT 2654-52-6 2785-06-0 2835-77-0 2835-95-2 2835-98-5 2835-99-6
 2871-01-4 2887-61-8 3011-34-5 3131-52-0, 1H-Indole-5,6-diol
 3158-63-2 3167-49-5 3204-61-3, 1,2,4,5-Benzenetetramine 3215-37-0
 3240-72-0 3342-78-7 3433-54-3 3457-46-3 3457-48-5 3457-55-4
 3468-11-9 3565-42-2, 2,3,4(1H)-**Quinolinetrione** 3674-33-7
 3715-17-1D, Tartrate, **salts** 3769-62-8 3812-32-6D, Carbonate,
salts **4181-05-9** 4318-76-7, 2,5-Pyridinediamine
 4331-29-7, 1H-Benzimidazol-4-amine 4363-93-3, 4-
Quinolinecarboxaldehyde 4444-26-2, Benzenehexamine 4928-43-2
 4940-39-0 5007-67-0 5099-39-8 5131-58-8 5192-03-0,
 1H-Indol-5-amine 5192-04-1, 1H-Indol-7-amine 5192-23-4,
 1H-Indol-4-amine 5217-47-0 5274-70-4 5307-02-8 5307-14-2
 5318-27-4, 1H-Indol-6-amine 5345-47-1 5416-80-8 5432-53-1
 5434-20-8 5551-11-1 5650-41-9 5718-83-2 5850-35-1 5959-52-4
 6093-67-0 6093-68-1 6201-65-6 **6203-18-5** 6247-27-4

6259-50-3 6322-56-1 6358-09-4 6361-22-4 6399-72-0 6628-04-2
 6628-86-0 6633-46-1 6634-82-8 6635-20-7 6781-42-6 6967-12-0,
 1H-Indazol-6-amine 7218-02-2 7313-70-4 7332-96-9 7336-20-1
 7429-90-5D, Aluminium, **salts** 7429-92-7D, Einsteinium,
salts 7439-93-2D, Lithium, **salts** 7439-95-4D,
 Magnesium, **salts** 7439-96-5D, Manganese, **salts**
 7440-23-5D, Sodium, **salts** 7440-24-6D, Strontium, **salts**
 7440-31-5D, Tin, **salts** 7440-39-3D, Barium, **salts**
 7440-48-4D, Cobalt, **salts** 7440-50-8D, Copper, **salts**
 7440-66-6D, Zinc, **salts** 7440-70-2D, Calcium, **salts**
7570-45-8 7575-35-1 7722-84-1, Hydrogen peroxide, biological
 studies 7749-47-5 7768-28-7 7770-45-8 10023-74-2D, Valerate,
salts **10040-98-9** 10041-06-2 10111-08-7,
 1H-Imidazole-2-carboxaldehyde 10173-66-7 10182-90-8D,
salts **10338-57-5** 10342-85-5 10549-76-5D,
 Tetrabutylammonium, **salts** 13010-31-6D, Tetrapropylammonium,
salts 13066-97-2 13129-67-4 13129-68-5 13129-69-6
 13167-95-8 13441-40-2D, **salts** 13505-39-0 13669-42-6, 3-
Quinolinecarboxaldehyde 13754-19-3, 4,5-Pyrimidinediamine
 14265-44-2D, Phosphate, **salts** 14268-66-7, 1,3-Benzodioxol-5-
 amine 14338-36-4 14501-66-7 14800-24-9D, Benzyltrimethylammonium,
salts 14808-79-8D, Sulfate, **salts** 15028-10-1
 15032-10-7 16082-33-0, 1H-Pyrazole-3,5-diamine 16214-27-0,
 1H-Indene-1,2(3H)-dione 16588-34-4 16634-88-1 16800-67-2
 16800-67-2D, **salts** 16800-68-3 16859-86-2 16867-03-1
 17028-61-4 17078-27-2 17422-74-1 17630-76-1 17672-22-9
 18073-18-2 18899-16-6D, **salts** 19005-93-7, 1H-Indole-2-
carboxaldehyde 19012-02-3 **19012-03-4** 19298-14-7
 19335-11-6, 1H-Indazol-5-amine 20103-09-7 20357-25-9 20432-35-3
 21240-56-2 22525-43-5 22711-20-2 22711-21-3 22711-23-5
 22715-34-0 22948-94-3 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7
 24905-87-1 25128-32-9 26216-16-0 27394-81-6 27841-29-8
 28020-38-4 29539-03-5 29705-39-3 31541-32-9 31680-07-6
 31835-64-0 31905-57-4D, Nitrophenylenediamine, derivs. 32479-73-5
 33288-79-8 33709-29-4 **33985-71-6** 35578-47-3 36075-79-3D,
salts 36429-85-3 36518-76-0 37705-82-1 38469-73-7
 39755-03-8 39755-95-8 39910-98-0 40101-17-5 **41602-56-6**
 41704-95-4 41946-53-6 42454-06-8 42758-54-3 43093-74-9D,
 Nitroaminophenol, derivs. 45791-64-8D, **salts** 46061-36-3
 46791-37-1D, **salts** 46881-39-4D, **salts** 46893-92-9D,
salts 50610-28-1 50899-59-7 51387-92-9 **51980-54-2**
 52605-12-6 52943-88-1 53003-19-3 53003-20-6 53055-05-3
 54263-79-5 54628-24-9D, **salts** 55047-63-7 55302-96-0
 55949-38-7, Pyrimidinol 56159-70-7 56932-44-6 57122-18-6D,
 Glycolate, **salts** **58028-76-5** 58480-17-4 58979-56-9
 59184-59-7 61224-35-9 61693-42-3 62077-85-4D, **salts**
 62378-72-7 62486-02-6 62486-03-7 62486-04-8 62496-02-0
63149-33-7 63969-46-0 64258-84-0 64993-07-3 66566-48-1
 66635-40-3 67608-58-6 67608-59-7 68391-32-2 68549-78-0
 69537-53-7D, **salts** 69564-74-5 69825-83-8 70484-29-6
 70643-19-5 71134-97-9 71177-91-8 73264-13-8D, **salts**
 74991-01-8D, **salts**

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyes containing aromatic or heteroarom.

aldehydes and ketones in combination with

1-acylindoline-3-one derivs., other dyes and color intensifiers)

IT 75722-39-3D, **salts** 77484-77-6 77523-60-5D, **salts**
 78521-11-6D, **salts** 79352-72-0 80030-92-8 81892-72-0

82228-89-5 82576-75-8 83073-86-3 83763-47-7 84540-47-6
 84540-50-1 **84562-48-1** 84677-32-7 85561-52-0 85679-78-3
 85926-99-4 87538-42-9 **90134-10-4** 90335-90-3 90395-44-1
 90817-34-8 91921-13-0D, **salts** 93841-24-8 93923-57-0
 95576-89-9 96516-29-9 97095-30-2 101403-71-8 103025-33-8, 1(4H)-
Pyridinecarboxaldehyde 104333-09-7 106110-60-5 106698-07-1
 110102-86-8 110952-46-0 114260-09-2 114402-54-9 115423-85-3
 115423-86-4 115571-79-4 117907-43-4 119532-73-9 122438-74-8D,
salts 126335-41-9 126335-43-1 128729-30-6 129697-50-3
 130582-56-8 133437-59-9 137103-78-7 137290-78-9 137290-86-9
 141614-04-2 141614-05-3 145092-00-8 146658-65-3 147025-37-4D,
salts 147801-94-3 147801-97-6 149330-25-6 149833-00-1D,
salts 155601-17-5 159661-40-2 159661-41-3 159661-42-4
 159661-43-5 159661-45-7 169381-72-0 187030-52-0 209120-51-4
 211872-02-5 215377-39-2 215377-40-5 215377-41-6 215377-42-7
 215377-43-8 215377-44-9 215377-45-0 215377-46-1 215377-47-2
 215377-48-3 215377-49-4 215377-50-7 215377-51-8 220118-56-9
 223384-47-2 223397-50-0D, **salts** 223397-66-8D, **salts**
 223397-83-9D, **salts** 223397-92-0D, **salts**
 223398-02-5 223398-35-4D, **salts** 223398-44-5D, **salts**
 260980-91-4 260980-92-5 260980-93-6 260980-94-7 260980-96-9
 260980-97-0 260980-98-1 260980-99-2 260981-00-8 278807-62-8D,
salts 278807-63-9D, **salts** 278807-64-0D,
salts 278807-65-1D, **salts** 278807-66-2D,
salts 278807-67-3 278807-68-4D, **salts**
 278807-69-5D, **salts** 278807-70-8D, **salts**
 278807-71-9D, **salts** 278807-72-0D, **salts**
 278807-73-1D, **salts** 278807-74-2D, **salts**
 278807-75-3D, **salts** 278807-76-4D, **salts**
 278807-77-5D, **salts** 278807-78-6D, **salts**
 278807-79-7D, **salts** 278807-80-0D, **salts**
 279214-38-9 279218-88-1D, **salts** 279218-90-5D, **salts**
 279218-92-7D, **salts** 279218-94-9D, **salts**
 279218-98-3D, **salts** 279219-00-0D, **salts**
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 325958-44-9D, **salts** 343218-85-9 346593-13-3 375856-52-3
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salts 503854-87-3D, **salts** 503854-88-4D,
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salts 503854-91-9D, **salts** 503854-92-0D,
salts 503854-93-1D, **salts** 503854-95-3D,
salts 503854-98-6D, **salts** 503855-00-3D,
salts 503855-01-4D, **salts** 503855-03-6D,
salts 503855-05-8D, **salts** 503855-07-0D,
salts 503855-09-2D, **salts** 503855-11-6D,
salts 503855-32-1 503855-35-4 503855-38-7 503855-42-3

503855-44-5 503855-47-8 503855-48-9 503855-49-0 503855-50-3
 503855-51-4 503855-53-6 503855-54-7 503855-55-8 503856-02-8
 503856-16-4 506430-28-0 506430-29-1 506430-30-4 506430-31-5

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)

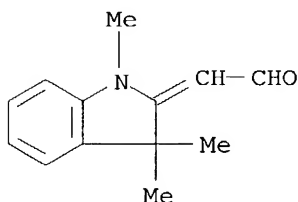
IT 84-83-3 100-10-7 120-21-8 487-89-8,
 1H-Indole-3-carboxaldehyde 1199-59-3 1204-86-0
 1424-66-4 2124-31-4 4181-05-9
 6203-18-5 7570-45-8 10040-98-9
 10338-57-5 19012-03-4 33985-71-6
 41602-56-6 51980-54-2 58028-76-5
 63149-33-7 84562-48-1 90134-10-4

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**hair** dyes containing **aromatic** or heteroarom.
aldehydes and **ketones** in **combination** with
 1-acylindoline-3-one derivs., other dyes and color intensifiers)

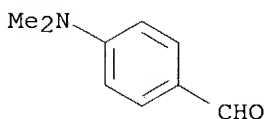
RN 84-83-3 HCAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)



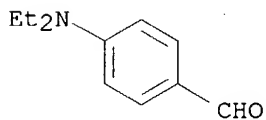
RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



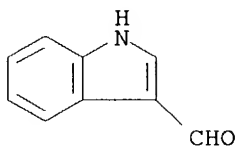
RN 120-21-8 HCAPLUS

CN Benzaldehyde, 4-(diethylamino)- (9CI) (CA INDEX NAME)

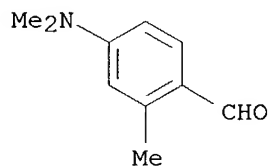


RN 487-89-8 HCAPLUS

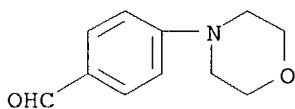
CN 1H-Indole-3-carboxaldehyde (9CI) (CA INDEX NAME)



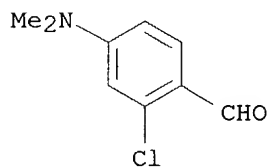
RN 1199-59-3 HCAPLUS
CN Benzaldehyde, 4-(dimethylamino)-2-methyl- (9CI) (CA INDEX NAME)



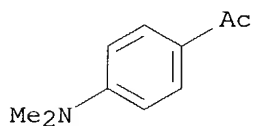
RN 1204-86-0 HCAPLUS
CN Benzaldehyde, 4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



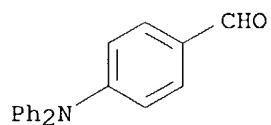
RN 1424-66-4 HCAPLUS
CN Benzaldehyde, 2-chloro-4-(dimethylamino)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



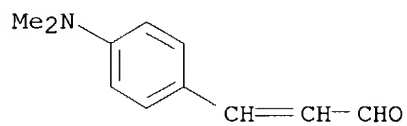
RN 2124-31-4 HCAPLUS
CN Ethanone, 1-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



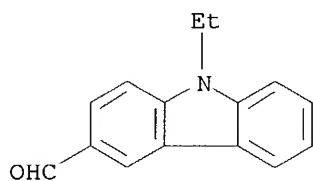
RN 4181-05-9 HCAPLUS
CN Benzaldehyde, 4-(diphenylamino)- (9CI) (CA INDEX NAME)



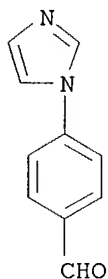
RN 6203-18-5 HCAPLUS
CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



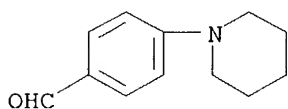
RN 7570-45-8 HCAPLUS
CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



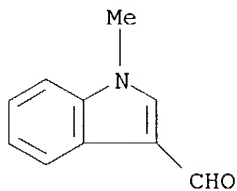
RN 10040-98-9 HCAPLUS
CN Benzaldehyde, 4-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



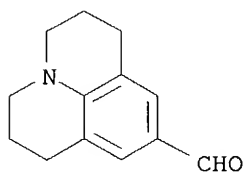
RN 10338-57-5 HCAPLUS
CN Benzaldehyde, 4-(1-piperidinyl)- (9CI) (CA INDEX NAME)



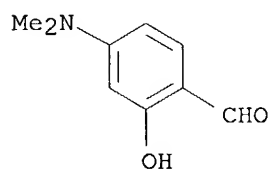
RN 19012-03-4 HCAPLUS
CN 1H-Indole-3-carboxaldehyde, 1-methyl- (9CI) (CA INDEX NAME)



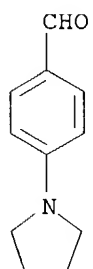
RN 33985-71-6 HCAPLUS
CN 1H,5H-Benzo[ij]quinolizine-9-carboxaldehyde, 2,3,6,7-tetrahydro- (6CI, 8CI, 9CI) (CA INDEX NAME)



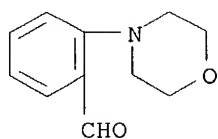
RN 41602-56-6 HCAPLUS
CN Benzaldehyde, 4-(dimethylamino)-2-hydroxy- (9CI) (CA INDEX NAME)



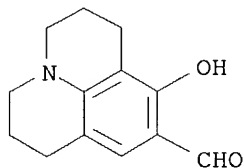
RN 51980-54-2 HCAPLUS
CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



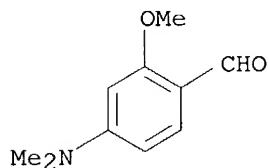
RN 58028-76-5 HCAPLUS
CN Benzaldehyde, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)



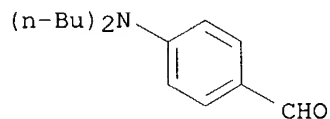
RN 63149-33-7 HCAPLUS
 CN 1H,5H-Benzo[ij]quinolizine-9-carboxaldehyde, 2,3,6,7-tetrahydro-8-hydroxy-
 (9CI) (CA INDEX NAME)



RN 84562-48-1 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



RN 90134-10-4 HCAPLUS
 CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)



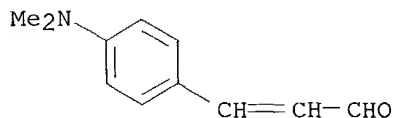
L69 ANSWER 7 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:278296 HCAPLUS
 DN 138:308929
 TI Use of carbonyl compounds in hair treating **compositions** to
 enhance color fastness of dyed hair
 IN Oberkobusch, Doris; Hoeffkes, Horst; Hollenberg, Detlef; Gross, Wibke;
 Akram, Mustafa; Moeller, Hinrich
 PA Henkel K.-G.a.A., Germany
 SO Ger. Offen., 32 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

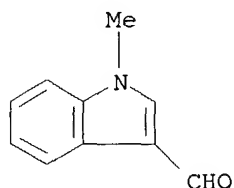
PI DE 10148671 A1 20030410 DE 2001-10148671 20011002
 WO 2003030848 A1 20030417 WO 2002-EP10957 20020930
 W: AU, BR, CA, CN, HU, JP, NO, PL, RU, US, VN
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
 LU, MC, NL, PT, SE, SK, TR
 PRAI DE 2001-10148671 A 20011002
 AB The invention concerns a method to increase color fastness of dyed hair
 that includes the treatment of hair before or after the dyeing process
 with a **composition** that contains aryl, heteroaryl or cyclic aliphatic
 carbonyl compds. with the exception of anthraquinone derivs. The
 treatment **comps.** further can contain polymers, surfactants,
 direct dyes protein hydrolyzates, UV filters, but they do not contain
 oxidative dyes. Thus a hair dye contained (g): Hydrenol D 8.5; Lorol 2.0;
 Eumulgin B2 1.5; Texapon NSO 15.0; Dehyton K 12.5; sodium sulfite 0.5;
 ascorbic acid 0.2; 4,5-diamino-1-(2-hydroxyethyl)pyrazole x H2SO4 1.03;
 ammonia (25% aqueous solution) to pH 10; water to 100. The dye was used in
 expts. for coloring hair. Samples were not treated after dyeing or
 treated with a **composition** that contained (g): Texapon NSO 15.0;
 Dehyton K 12.5; Hydrenol D 8.50; Lorol 2.00; Eumulgin B2 0.75; sodium
 sulfite 0.25; ascorbic acid 0.20; 3-dicyanmethylen indane-1-one 1.16;
 ammonia (25% aqueous solution) to pH 10; water to 100. Treated and untreated
 hair samples were exposed to washing tests and color fastness was
 measured; the treated samples were superior by 4.44 units.
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 IT Optical filters
 (UV; use of carbonyl compds. in hair treating **comps.** to
 enhance color fastness of dyed hair)
 IT Carbonyl compounds (organic), biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (aromatic; use of carbonyl compds. in hair treating **comps.** to
 enhance color fastness of dyed hair)
 IT Carbonyl compounds (organic), biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (cyclic aliphatic; use of carbonyl compds. in hair treating **comps.**
 . to enhance color fastness of dyed hair)
 IT Dyes
 (direct; use of carbonyl compds. in hair treating **comps.** to
 enhance color fastness of dyed hair)
 IT Hair preparations
 (dyes, oxidative, excluded; use of carbonyl compds. in hair treating
comps. to enhance color fastness of dyed hair)
 IT Hair preparations
 (dyes; use of carbonyl compds. in hair treating **comps.** to
 enhance color fastness of dyed hair)
 IT Color
 (fastness; use of carbonyl compds. in hair treating **comps.**
 to enhance color fastness of dyed hair)
 IT Carbonyl compounds (organic), biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (heteroaryl; use of carbonyl compds. in hair treating **comps.**
 to enhance color fastness of dyed hair)
 IT Surfactants
 (use of carbonyl compds. in hair treating **comps.** to enhance
 color fastness of dyed hair)
 IT Carbonyl compounds (organic), biological studies
 Polymers, biological studies

Protein hydrolyzates

- RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(use of carbonyl compds. in hair treating **compns.** to enhance color fastness of dyed hair)
- IT 84-65-1D, Anthraquinone, derivs.
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(excluded; use of carbonyl compds. in hair treating **compns.** to enhance color fastness of dyed hair)
- IT 82-86-0, Acenaphthenequinone 84-11-7, 9,10-Phenanthrenequinone
90-15-3, 1-Naphthalenol 91-56-5, Isatin 99-61-6, 3-Nitrobenzaldehyde
458-36-6, Coniferylaldehyde 492-73-9, 2,2'-Pyridil 524-42-5,
1,2-Naphthoquinone 552-89-6, 2-Nitrobenzaldehyde 555-16-8,
4-Nitrobenzaldehyde, biological studies 611-09-6, 5-Nitroisatin
615-94-1, 2,5-Dihydroxy-p-benzoquinone 623-27-8, Terephthalaldehyde
626-19-7, Isophthalaldehyde 830-74-0 1080-74-6 1477-49-2
2066-93-5, 1,2-Naphthoquinone-4-sulfonic acid 2835-95-2 2835-99-6
3433-54-3 **6203-18-5** 6369-59-1 14874-70-5D,
Tetrafluoroborate, salts 15201-05-5D, salts 16053-58-0D, salts
16722-51-3D, salts, biological studies 16887-00-6D, Chloride, salts
16919-18-9D, Hexafluorophosphate, salts **19012-03-4** 20461-54-5,
Iodide, biological studies 24959-67-9D, Bromide, salts 37181-39-8D,
salts 54628-24-9D, salts 61394-93-2, 4-Nitroisatin 112656-95-8
118860-85-8 122438-74-8D, salts 149330-25-6 223398-02-5
223398-08-1 364343-79-3 507490-23-5 507490-24-6D, salts
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(use of carbonyl compds. in **hair** treating **compns.** to enhance color fastness of dyed **hair**)
- IT **6203-18-5** **19012-03-4**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(use of carbonyl compds. in **hair** treating **compns.** to enhance color fastness of dyed **hair**)
- RN 6203-18-5 HCAPLUS
CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



- RN 19012-03-4 HCAPLUS
CN 1H-Indole-3-carboxaldehyde, 1-methyl- (9CI) (CA INDEX NAME)



L69 ANSWER 8 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:5740 HCAPLUS
DN 138:78134

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

TI Direct hair dyes composed of 1-benzopyrane-derivatives and an electrophilic substance
 IN Sauter, Guido; Braun, Hans-Juergen; Brouillard, Raymond; Fougerousse, Andre; Roehri-Stoeckel, Christine
 PA Wella Aktiengesellschaft, Germany
 SO PCT Int. Appl., 51 pp.
 CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003000214	A1	20030103	WO 2002-EP1194	20020206
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10130144	A1	20030102	DE 2001-10130144	20010622
	BR 2002005662	A	20030715	BR 2002-5662	20020206
	US 2003196281	A1	20031023	US 2003-380896	20030320
PRAI	DE 2001-10130144	A	20010622		
	WO 2002-EP1194	W	20020206		

OS MARPAT 138:78134

AB The invention concerns a two component hair dye where the components are mixed in the presence of acids or bases if required to form a direct dye that can be removed with sulfite-containing reducing agents if required. The first component includes 1-benzopyrane-derivs.; the second component contains an electrophilic substance that is selected from the group of carbonyls, imines and 1-alkyl-quinoline derivs. Thus a first components was composed of (g): 7-hydroxy-4-methyl-2-phenyl-1-benzylpyrylium chloride 3.14; cetylstearyl alc. 12.0; Brij 78 P 2.8; ethanol 24.8; water to 100. The second component was a **mixture** of (g): 4-hydroxy-3-methoxybenzaldehyde 1.75; cetylstearyl alc. 12.0; Brij 78 P 2.8; ethanol 24.8; water to 100.

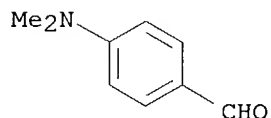
IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

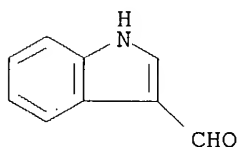
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932-95-6, 2,5-Thiophenedicarboxaldehyde 1003-29-8, Pyrrol-2-aldehyde
 1192-58-1, N-Methylpyrrol-2-aldehyde 1194-98-5, 2,5-
 Dihydroxybenzaldehyde 1952-37-0, 4-[[[(2-Hydroxyethyl)imino]methyl]pheno
 1 1952-38-1, 2-[[[(2-Hydroxyethyl)imino]methyl]phenol **1971-81-9**
 , 4-Dimethylamino-1-naphthaldehyde 2144-08-3, 2,3,4-
 Trihydroxybenzaldehyde 2233-18-3, 3,5-Dimethyl-4-hydroxybenzaldehyde
 4771-49-7, 6-Methylindole-3-carboxaldehyde 5392-12-1,
 2-Methoxy-1-naphthaldehyde **6203-18-5**, 4-
 Dimethylaminozintaldehyde 6625-79-2 7311-34-4, 3,5-
 Dimethoxybenzaldehyde **7570-45-8**, N-Ethylcarbazol-3-aldehyde
 7770-45-8, 4-Hydroxy-1-naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde
 13677-79-7, 3,4,5-Trihydroxybenzaldehyde 15941-84-1 15971-29-6,
 4-Methoxy-1-naphthaldehyde 16560-44-4 16843-24-6, 2-Chloro-1-
 methylquinolinium-tetrafluoroborate 17065-03-1, 4-[[[(2-
 Hydroxyphenyl)imino]methyl]phenol 17422-74-1, Chromon-3-carboxaldehyde
 17754-90-4, 4-Diethylamino-2-hydroxybenzaldehyde 18095-64-2D, salts
 18278-34-7, 4-Hydroxy-2-methoxybenzaldehyde 20921-29-3 26091-47-4
 27976-81-4, N,N-Dimethyl-4-[[[(2-hydroxyethyl)imino]methyl]aniline
 29865-90-5, 3,4-Dimethoxy-5-hydroxybenzaldehyde 42059-81-4
 45994-10-3D, salts 45998-43-4D, salts 46878-55-1D, salts
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 hydroxyphenyl)imino]methyl]phenol 66820-52-8 68282-53-1,
 4-Methyl-5-imidazolcarboxaldehyde 70365-18-3, 4-[[[(2-
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 4-Dimethylamino-2-methoxybenzaldehyde 88851-29-0 **90134-10-4**,
 4-Dibutylaminobenzaldehyde 90920-74-4 93439-34-0 100980-82-3
 106001-58-5, 4-Diethylamino-3-methoxybenzaldehyde 110335-17-6
 116209-27-9, 3-Methoxy-4-(1-pyrrolidinyl)benzaldehyde 117125-17-4D,
 4-Chloro-1-ethylquinoline, salts 119658-57-0 125187-46-4 134822-76-7
 187030-52-0, 5-[4-(Diethylamino)phenyl]-2,4-pentadienal 198829-37-7D,
 salts 198829-39-9D, salts 198829-40-2 373390-26-2,
 5-[[[(2-Hydroxyethyl)imino]methyl]-2-methoxyphenol 373390-27-3,
 2,6-Dimethoxy-4-[[[(2-hydroxyethyl)imino]methyl]phenol 373390-28-4,
 1,2-Dihydroxy-4-[[[(2-hydroxyethyl)imino]methyl]benzene 373390-29-5,
 1,2-Dihydroxy-3-[[[(2-hydroxyethyl)imino]methyl]benzene 373390-30-8,
 4-[[[(3-Hydroxypropyl)imino]methyl]phenol 373390-31-9,
 2,6-Dimethoxy-4-[[[(3-Hydroxypropyl)imino]methyl]phenol 373390-32-0,
 4-[[[(2,3-Dihydroxypropyl)imino]methyl]phenol 373390-33-1,
 2,6-Dimethoxy-4-[[[(2,3-dihydroxypropyl)imino]methyl]phenol 373390-34-2
 373390-35-3 373390-36-4, 4-[[[(2-Hydroxy-2-phenylethyl)imino]methyl]phen
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 479542-24-0 479542-25-1 479542-26-2 479542-27-3 479542-28-4
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (direct **hair** dyes composed of 1-benzopyrane-derivs. and an
 electrophilic substance)

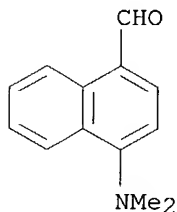
IT 100-10-7, 4-Dimethylaminobenzaldehyde 487-89-8,
 Indole-3-carbaldehyde 1971-81-9, 4-Dimethylamino-1-
 naphthaldehyde 6203-18-5, 4-Dimethylaminozimaldehyde
 7570-45-8, N-Ethylcarbazol-3-aldehyde 84562-48-1,
 4-Dimethylamino-2-methoxybenzaldehyde 90134-10-4,
 4-Dibutylaminobenzaldehyde
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (direct hair dyes composed of 1-benzopyrane-derivs. and an
 electrophilic substance)
 RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



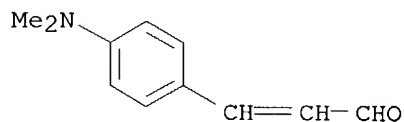
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 CN 1H-Indole-3-carboxaldehyde (9CI) (CA INDEX NAME)



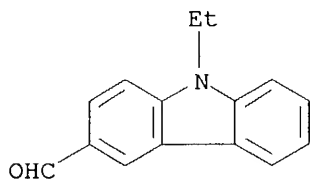
RN 1971-81-9 HCAPLUS
 CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 6203-18-5 HCAPLUS
 CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)

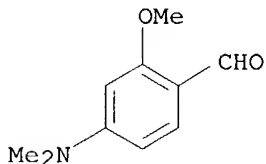


RN 7570-45-8 HCAPLUS
 CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



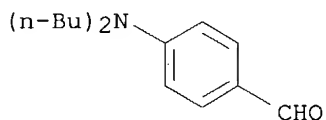
RN 84562-48-1 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)



RN 90134-10-4 HCAPLUS

CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 9 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:904284 HCAPLUS

DN 137:375002

TI Synthesis of N-benzyl-m-phenylenediamine derivatives and their use in oxidative hair dyes

IN Chassot, Laurent; Braun, Hans-Juergen

PA Wella Ag, Germany

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10125451	A1	20021128	DE 2001-10125451	20010525
	WO 2002096854	A1	20021205	WO 2002-EP1087	20020202
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

BR 2002005434 A 20030624 BR 2002-5434 20020202
 US 2003182735 A1 20031002 US 2003-333045 20030115

PRAI DE 2001-10125451 A 20010525
 WO 2002-EP1087 W 20020202

OS MARPAT 137:375002

AB The invention concerns N-benzyl-m-phenylenediamine derivs., their synthesis and application as coupling agents in oxidative hair dyes. Thus 2-[4-amino-2-benzylamino-phenoxy]-ethanol hydrochloride was synthesized in a two step reaction starting from 2-(2,4-diaminophenoxy)ethanol and di-tert.-butyldicarbonate; the product was reacted with benzaldehyde. A hair dye **composition** contained: 2-[4-amino-2-benzylamino-phenoxy]-ethanol hydrochloride 1.25 mmol; 1,4-diaminobenzene 1.25 mmol; potassium oleate (8% solution) 1.0 g; ammonia (22% solution) 1.0 g; ethanol 1.0g; ascorbic acid 0.3 g; water to 100 g.

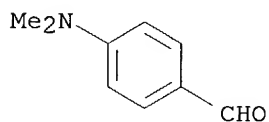
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 ICS C07C233-18; C07C215-00; C07C311-00; C07C317-00; C07C323-00; C07F007-10; A61K007-13; C07D231-38; D06P001-642

CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 25

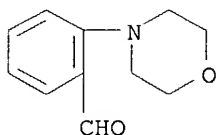
IT 90-02-8, 2-Hydroxybenzaldehyde, reactions **100-10-7**, 4-Dimethylaminobenzaldehyde 100-52-7, Benzaldehyde, reactions 100-83-4, 3-Hydroxybenzaldehyde 122-85-0, 4-Acetamidobenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 123-11-5, 4-Methoxybenzaldehyde, reactions 135-02-4, 2-Methoxybenzaldehyde 529-23-7, 2-Aminobenzaldehyde 555-16-8, 4-Nitrobenzaldehyde, reactions 619-66-9, 4-Formyl benzoic acid 1194-98-5, 2,5-Dihydroxybenzaldehyde 1709-44-0, 3-Aminobenzaldehyde 17354-79-9 22042-73-5 24424-99-5, Di-tert-butyldicarbonate 27913-86-6 **58028-76-5** 70643-19-5, 2-(2,4-Diaminophenoxy)ethanol 144072-30-0, (4-Formyl-phenyl)-carbamic acid tert-butylester 402826-41-9 402826-43-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (synthesis of N-benzyl-m-phenylenediamine derivs. and their use in oxidative **hair** dyes)

IT **100-10-7**, 4-Dimethylaminobenzaldehyde **58028-76-5**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (synthesis of N-benzyl-m-phenylenediamine derivs. and their use in oxidative **hair** dyes)

RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)

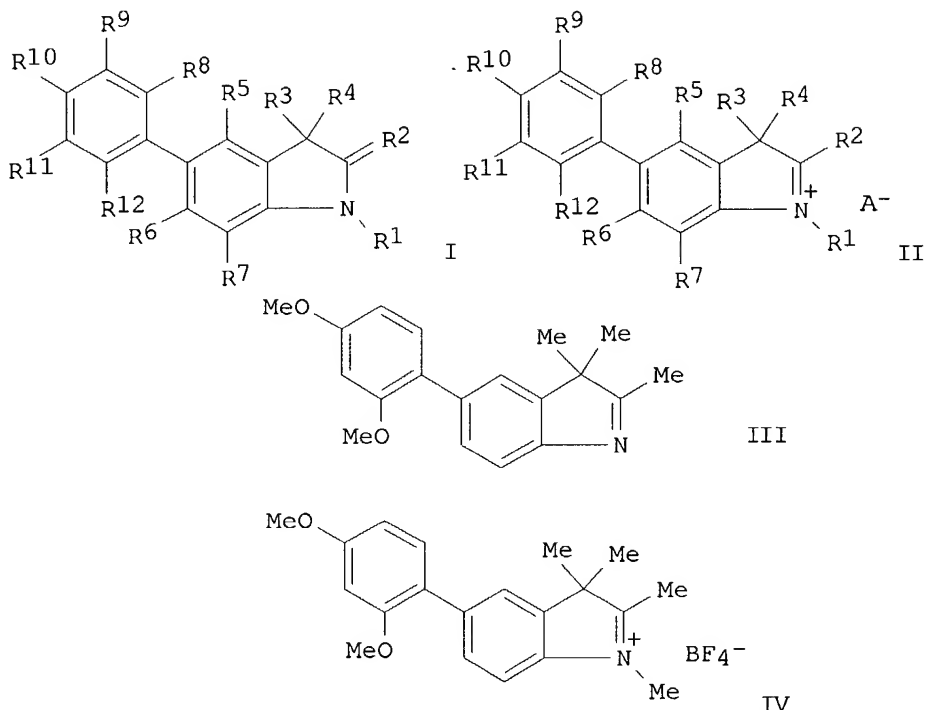


RN 58028-76-5 HCAPLUS
 CN Benzaldehyde, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)



L69 ANSWER 10 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:811804 HCAPLUS
 DN 137:325330
 TI Preparation of 5-aryl-1,3,3-trimethyl-2-methylen-indoles and their iminium salts for the temporary dyeing of hair fibers
 IN Sauter, Guido; Braun, Hans-Juergen; Reichlin, Nadia
 PA Wella A.-G., Germany
 SO Ger. Offen., 40 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10119204	A1	20021024	DE 2001-10119204	20010419
	WO 2002085854	A1	20021031	WO 2002-EP706	20020124
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1280773	A1	20030205	EP 2002-727315	20020124
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2002005040	A	20030429	BR 2002-5040	20020124
	US 2003213071	A1	20031120	US 2002-297369	20021204
PRAI	DE 2001-10119204	A	20010419		
	WO 2002-EP706	W	20020124		
OS	CASREACT 137:325330; MARPAT 137:325330				
GI					



AB Title compds. I and II [R1 = alkyl, hydroxyalkyl, polyhydroxyalkyl, etc.; R2 = CHR; R = H, alkyl; R3, R4 = alkyl, (CH₂)_nRc, (CH₂)_nCORc, etc.; n = 1-3; Rc = H, (un)substituted aromatic carbocycle, aromatic heterocycle, etc.; R5-R12 = H, alkyl, hydroxyalkyl, etc.; A⁻ = anion of inorg. or organic acid] were prepared. The invention relates to hair dye kits containing 2-component hair dye **comps.** (A1 and A2) and a sulfite reductive decolorizing agent. Component A2 comprises of at least 1 carbonyl compd. and component A1 comprises of at least one indoline I or one 3H-indolium II deriv. For example, methylation indole of III, e.g., prepd. from 5-bromo-2,3,3-trimethyl-3H-indole and 2,4-dimethoxyphenylboronic acid, with trimethyloxonium tetrafluoroborate afforded indolium IV in 55% yield. In coloration studies of bleached hair, 7-examples of compds. II (A1) in **combination** with 4-carbonyl compds. (A2) resulted in a range of hair coloring, e.g., a prepn. of indolium IV and 4-hydroxy-3-methoxybenzaldehyde produced a red color and white after reductive decolorization.

IC ICM C07D209-08

ICS C07D209-54; C07D405-04; C07F005-04; C09B007-00; D06P005-06

CC 27-11 (Heterocyclic Compounds (One Hetero Atom))

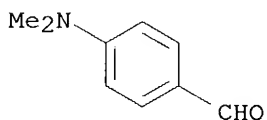
Section cross-reference(s): 62

IT 58-27-5, 2-Methyl-1,4-naphthodione 86-51-1, 2,3-Dimethoxybenzaldehyde
 90-02-8, 2-Hydroxybenzaldehyde, reactions 93-02-7, 2,5-Dimethoxybenzaldehyde
 95-01-2, 2,4-Dihydroxybenzaldehyde 98-03-3, 2-Thiophenecarboxaldehyde
 99-61-6, 3-Nitrobenzaldehyde **100-10-7**, 4-Dimethylaminobenzaldehyde
 120-14-9, 3,4-Dimethoxybenzaldehyde 121-32-4, 3-Ethoxy-4-hydroxybenzaldehyde
 121-33-5, 4-Hydroxy-3-methoxybenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 134-96-3,
 3,5-Dimethoxy-4-hydroxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde
 148-53-8, 2-Hydroxy-3-methoxybenzaldehyde 458-36-6, 4-Hydroxy-3-

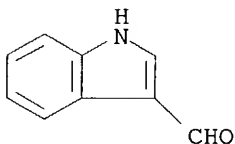
methoxyzimtaldehyde 487-70-7, 2,4,6-Trihydroxybenzaldehyde
487-89-8, 1H-Indole-3-carboxaldehyde 498-62-4,
 Thiophen-3-aldehyde 552-89-6, 2-Nitrobenzaldehyde 555-16-8,
 4-Nitrobenzaldehyde, reactions 613-45-6, 2,4-Dimethoxybenzaldehyde
 619-66-9, 4-Carboxybenzaldehyde 620-02-0, 5-Methylfurfural 621-59-0,
 3-Hydroxy-4-methoxybenzaldehyde 623-27-8, Benzene-1,4-dicarbaldehyde
 643-79-8, 1,2-Phthalaldehyde 932-41-2, 2,3-Thiophenedicarboxaldehyde
 932-95-6, 2,5-Thiophenedicarboxaldehyde 1003-29-8, Pyrrol-2-aldehyde
 1192-58-1, N-Methylpyrrol-2-aldehyde 1194-98-5, 2,5-
 Dihydroxybenzaldehyde 1952-37-0, 4-[[[(2-Hydroxyethyl)imino]methyl]phenol
 1952-38-1, 2-[[[(2-Hydroxyethyl)imino]methyl]phenol **1971-81-9**,
 4-Dimethylamino-1-naphthaldehyde 2144-08-3, 2,3,4-Trihydroxybenzaldehyde
 2233-18-3, 3,5-Dimethyl-4-hydroxybenzaldehyde 4771-49-7,
 6-Methylindol-3-carboxaldehyde 5392-12-1, 2-Methoxy-1-naphthaldehyde
6203-18-5, 4-Dimethylaminozimtaldehyde 7311-34-4,
 3,5-Dimethoxybenzaldehyde **7570-45-8**, N-Ethylcarbazol-3-aldehyde
 7770-45-8, 4-Hydroxy-1-naphthaldehyde 10031-82-0, 4-Ethoxybenzaldehyde
 13677-79-7, 3,4,5-Trihydroxybenzaldehyde 15971-29-6,
 4-Methoxy-1-naphthaldehyde 17065-03-1, 4-[[[(2-
 Hydroxyphenyl)imino]methyl]phenol 17422-74-1, Chromon-3-carboxaldehyde
 17754-90-4, 4-Diethylamino-2-hydroxybenzaldehyde 18278-34-7,
 4-Hydroxy-2-methoxybenzaldehyde 27976-81-4, N,N-Dimethyl-4-[[[(2-
 hydroxyethyl)imino]methyl]aniline 29865-90-5, 3,4-Dimethoxy-5-
 hydroxybenzaldehyde 42059-81-4 64073-92-3, 2,6-Dimethoxy-4-[[[(2-
 hydroxyphenyl)imino]methyl]phenol 68282-53-1, 4-Methylimidazol-5-
 carboxaldehyde 69155-75-5, 6-Hydroxychromon-3-carboxaldehyde
 70365-18-3, 4-[[[(2-Hydroxyethyl)imino]methyl]-2-methoxyphenol
84562-48-1, 4-Dimethylamino-2-methoxybenzaldehyde 87345-53-7,
 3,5-Dimethoxy-4-hydroxyzimtaldehyde **90134-10-4**,
 4-Dibutylaminobenzaldehyde 100980-82-3 106001-58-5,
 4-Diethylamino-3-methoxybenzaldehyde 116209-27-9, 3-Methoxy-4-(1-
 pyrrolidinyl)benzaldehyde 187030-52-0, 5-[4-(Diethylamino)phenyl]-2,4-
 pentadienal 373390-26-2, 5-[[[(2-Hydroxyethyl)imino]methyl]-2-
 methoxyphenol 373390-27-3, 2,6-Dimethoxy-4-[[[(2-
 hydroxyethyl)imino]methyl]phenol 373390-28-4, 1,2-Dihydroxy-4-[[[(2-
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 Dihydroxypropyl)imino]methyl]phenol 373390-33-1, 2,6-Dimethoxy-4-[[[(2,3-
 dihydroxypropyl)imino]methyl]phenol 373390-34-2, 2-[(4-
 Hydroxybenzylidene)amino]propan-1,3-diol 373390-35-3,
 2-[(4-Hydroxy-3,5-dimethoxybenzylidene)amino]propan-1,3-diol
 373390-36-4, 4-[[[(2-Hydroxy-2-phenylethyl)imino]methyl]phenol
 373390-38-6 373390-39-7, 2-[(4-Dimethylaminonaphthalen-1-
 ylmethylene)amino]ethanol 373390-42-2 373390-43-3,
 2-[(4-Hydroxy-3,5-dimethoxybenzylidene)amino]-3-(imidazol-4-yl)propanoic
 acid 373390-44-4, 2-[(4-Hydroxybenzylidene)amino]-3-(imidazol-4-
 yl)propanoic acid 373390-46-6, 2-[(4-Hydroxybenzylidene)amino]-3-(indol-
 3-yl)propanoic acid 373390-47-7, 1,2,3-Trihydroxy-4-[[[(2-
 hydroxyethyl)imino]methyl]benzene 373390-48-8, 1,2,3-Trihydroxy-4-[[[(2-
 hydroxyethyl)imino]methyl]benzene 473437-36-4, 2,6-Dimethoxy-4-[[[(1-
 phenyl-2-hydroxyethyl)imino]methyl]phenol 473437-41-1,
 2-[(4-Hydroxy-3,5-dimethoxybenzylidene)amino]-3-(indol-3-yl)propanoic acid
 473437-43-3, 1,2,3-Trihydroxy-5-[[[(2-hydroxyethyl)imino]methyl]benzene
 RL: COS (Cosmetic use); RCT (Reactant); BIOL (Biological study); RACT
 (Reactant or reagent); USES (Uses)
 (preparation of methyleneindoles and their iminium salts for the temporary

dyeing of **hair** fibers)

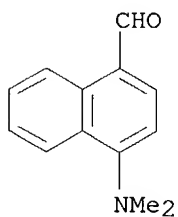
IT 100-10-7, 4-Dimethylaminobenzaldehyde 487-89-8,
 1H-Indole-3-carboxaldehyde 1971-81-9, 4-Dimethylamino-1-
 naphthaldehyde 6203-18-5, 4-Dimethylaminozimaldehyde
 7570-45-8, N-Ethylcarbazol-3-aldehyde 84562-48-1,
 4-Dimethylamino-2-methoxybenzaldehyde 90134-10-4,
 4-Dibutylaminobenzaldehyde
 RL: COS (Cosmetic use); RCT (Reactant); BIOL (Biological study); RACT
 (Reactant or reagent); USES (Uses)
 (preparation of methyleneindoles and their iminium salts for the temporary
 dyeing of **hair** fibers)
 RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



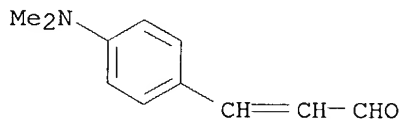
RN 487-89-8 HCAPLUS
 CN 1H-Indole-3-carboxaldehyde (9CI) (CA INDEX NAME)



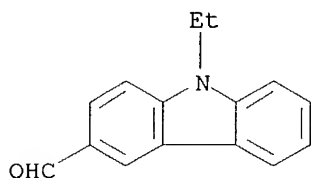
RN 1971-81-9 HCAPLUS
 CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



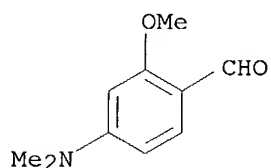
RN 6203-18-5 HCAPLUS
 CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



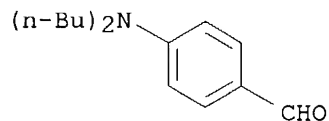
RN 7570-45-8 HCAPLUS
 CN 9H-Carbazole-3-carboxaldehyde, 9-ethyl- (9CI) (CA INDEX NAME)



RN 84562-48-1 HCAPLUS
CN Benzaldehyde, 4-(dimethylamino)-2-methoxy- (9CI) (CA INDEX NAME)

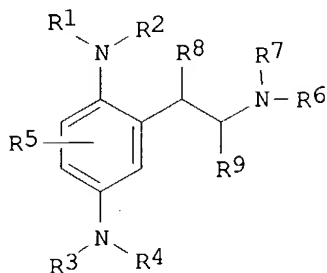


RN 90134-10-4 HCAPLUS
CN Benzaldehyde, 4-(dibutylamino)- (9CI) (CA INDEX NAME)

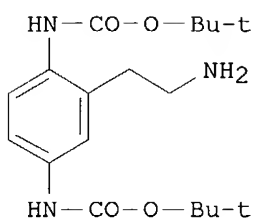


L69 ANSWER 11 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:750510 HCAPLUS
DN 137:280569
TI Preparation of 2-(2-aminoethyl)-1,4-benzenediamines for use in the
oxidative dyeing of keratin fibers
IN Chassot, Laurent; Braun, Hans-Juergen
PA Wella A.-G., Germany
SO Ger. Offen., 20 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

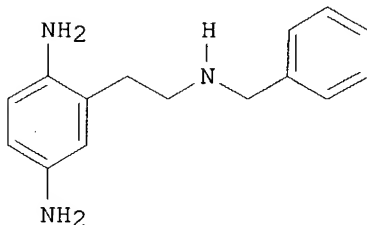
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10112506	A1	20021002	DE 2001-10112506	20010315
PRAI	DE 2001-10112506		20010315		
OS	MARPAT 137:280569				
GI					



I



II



III

AB Title compds. I [R1-R4 = H, alkyl, hydroxyalkyl, etc.; R5 = H, halo, alkyl, etc.; R6, R7 = H, alkyl, alkene, etc.; R8, R9 = H, alkyl] were prepared. For example, NaBH(OAc)₃ mediated reductive amination of benzaldehyde with amine II, prepared from 2-(2,5-diaminophenyl)ethanol sulfate in 2-steps, followed by amine deprotection, afforded benzenediamine III. In coloration studies of bleached hair, 29-examples of compds. I in **combination** with 4-dyeing developers resulted in a range of hair coloring, e.g., a preparation of compound III and

1,3-benzenediol

produced the color blond.

IC ICM C07C211-51

ICS C07C211-52; C07C211-53; C07C215-08; C07C217-00; D06P001-645;
A61K007-13; C07C255-58

CC 40-6 (Textiles and Fibers)

Section cross-reference(s): 25, 41

IT 90-15-3, 1-Naphthalenol 95-88-5, 1-Chloro-2,4-dihydroxybenzene
97-51-8, 2-Hydroxy-5-nitrobenzaldehyde 98-03-3, 2-Thiophenecarboxaldehyde 100-10-7, 4-Dimethylaminobenzaldehyde
100-52-7, Benzaldehyde, reactions 106-50-3, 1,4-Diaminobenzene, reactions 107-82-4, 1-Bromo-3-methylbutane 108-46-3,
1,3-Dihydroxybenzene, reactions 109-65-9, 1-Bromobutane 120-57-0,
3,4-Methylenedioxybenzaldehyde 122-85-0, 4-Acetylaminobenzaldehyde
123-08-0, 4-Hydroxybenzaldehyde 123-30-8, 4-Aminophenol 350-46-9,
4-Fluoronitrobenzene 364-73-8, 5-Bromo-2-fluoronitrobenzene 364-74-9,
2,5-Difluoronitrobenzene 364-76-1 446-35-5, 2,4-Difluoronitrobenzene
453-71-4, 4-Fluoro-3-nitrobenzoic acid 498-62-4, Thiophen-3-aldehyde
500-22-1, Pyridin-3-aldehyde 555-16-8, 4-Nitrobenzaldehyde, reactions
587-04-2, 3-Chlorobenzaldehyde 591-27-5, 3-Aminophenol 608-25-3,
2-Methyl-1,3-dihydroxybenzene 615-50-9 872-85-5, 4-Pyridinecarboxaldehyde 1121-60-4, 2-Pyridinecarboxaldehyde 1493-27-2,
2-Fluoronitrobenzene 2043-61-0, Cyclohexane-1-aldehyde 2835-95-2,
5-Amino-2-methylphenol 2835-99-6, 3-Methyl-4-aminophenol 3446-89-7,
4-Methylsulfanylbenzaldehyde 4701-17-1, 5-Bromothiophen-2-aldehyde
5697-02-9, 1-Acetoxy-2-methylnaphthalene 6203-18-5,

4-Dimethylamino-zimtaldehyde 6921-22-8, 2,3-Difluoronitrobenzene
7304-32-7, 2-Fluoro-5-nitrobenzoic acid 18791-75-8, 4-Bromothiophen-2-
aldehyde 24424-99-5, Di-tert-butylidicarbonate **51980-54-2**,
4-Pyrrolidin-1-ylbenzaldehyde 70643-20-8, 1,3-Diamino-4-(2-
hydroxyethoxy)benzene sulfate 83763-48-8 84540-50-1,
3-Amino-2-chloro-6-methylphenol 93841-25-9, 2-(2,5-Diaminophenyl)ethanol
Sulfate 135043-64-0, 4-Amino-2-aminomethylphenol dihydrochloride
155601-30-2 334884-86-5 463935-73-1 463935-74-2

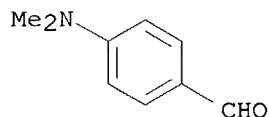
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of 2-(2-aminoethyl)-1,4-benzenediamines for use as
coupling agents in oxidative **hair** dyes)

IT **100-10-7**, 4-Dimethylaminobenzaldehyde **6203-18-5**,
4-Dimethylamino-zimtaldehyde **51980-54-2**, 4-Pyrrolidin-1-
ylbenzaldehyde

RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of 2-(2-aminoethyl)-1,4-benzenediamines for use as
coupling agents in oxidative **hair** dyes)

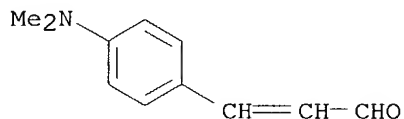
RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



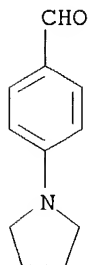
RN 6203-18-5 HCAPLUS

CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 51980-54-2 HCAPLUS

CN Benzaldehyde, 4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



L69 ANSWER 12 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:714095 HCAPLUS

DN 137:252662

TI Oxidative **hair** dyes containing aldehydes in the dye solution for

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

improving color intensity
 PA Wella Ag, Germany
 SO Ger. Gebrauchsmusterschrift, 36 pp.
 CODEN: GGXXFR
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 20206612	U1	20020919	DE 2002-20206612	20020426
PRAI	DE 2002-20206612		20020426		
OS	MARPAT 137:252662				
AB	The invention concerns oxidative hair dyes that are mixed before application with a hydrogen peroxide solution that contains an aldehyde , linear or aromatic ; the obtained dye solution excels improved color intensity. Thus a dye mixture was prepared that contained 0.01 mmol 1,4-diamino-2-methyl-benzene, 0.01 mmol resorcin and the components (g): EDTA disodium salt 0.3; ascorbic acid 0.3; lauryl ether sulfate 2.8; ethanol (96%) 8.0; ammonia (25 % aqueous solution) 9.0; water to 100. To 20 g of the dye mixture was mixed with 20 g of 6% hydrogen peroxide in 1% aqueous glutaraldehyde. The mixture was applied to bleached hair for 10 min at 40°C.				
IC	ICM A61K007-13				
CC	62-3 (Essential Oils and Cosmetics)				
ST	oxidn hair dye solvent aldehyde color intensity				
IT	Aldehydes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aliphatic; oxidative hair dyes containing aldehydes in dye solution for improving color intensity)				
IT	Aldehydes , biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aromatic ; oxidative hair dyes containing aldehydes in dye solution for improving color intensity)				
IT	Dyes (direct; oxidative hair dyes containing aldehydes in dye solution for improving color intensity)				
IT	Hair preparations (dyes, oxidative; oxidative hair dyes containing aldehydes in dye solution for improving color intensity)				
IT	Cis pH (oxidative hair dyes containing aldehydes in dye solution for improving color intensity)				
IT	Aldehydes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (oxidative hair dyes containing aldehydes in dye solution for improving color intensity)				
IT	66-25-1, Hexanal 75-07-0, Acetaldehyde, biological studies 78-84-2, Isobutyraldehyde 80-54-6, p-tert-Butyl- α -methylhydrocinnamic aldehyde 83-56-7, 1,5-Dihydroxynaphthalene 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 89-57-6, 5-Aminosalicylic acid 89-83-8, 5-Methyl-2-(1-methylethyl)phenol 90-15-3, 1-Naphthol 91-56-5, 2,3-Indolinedione 91-68-9, 3-Diethylaminophenol 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, 4-[Ethyl(2-hydroxyethyl)amino]aniline 93-05-0, 4-Diethylaminoaniline 95-70-5, 1,4-Diamino-2-methylbenzene 95-88-5, 1-Chloro-2,4-dihydroxybenzene 96-17-3, 2-Methylbutyraldehyde 97-96-1, 2-Ethylbutyraldehyde 99-07-0, 3-Dimethylaminophenol 99-98-9,				

4-Dimethylaminoaniline 101-54-2, 4-Phenylaminoaniline 101-86-0,
 2-(Phenylmethylene)octanal 103-95-7 106-23-0, 3,7-Dimethyl-6-octenal
 106-50-3, 1,4-Diaminobenzene, biological studies 107-75-5,
 3,7-Dimethyl-7-hydroxyoctanal 108-45-2, 1,3-Diaminobenzene, biological
 studies 110-62-3, Pentanal 111-30-8, Glutaraldehyde 111-71-7,
 Heptanal 116-26-7, 2,6,6-Trimethyl-1,3-cyclohexadiene-1-carboxaldehyde
 120-57-0, Heliotropin 122-40-7, 2-(Phenylmethylene)heptanal 122-78-1,
 Phenylethanal 123-05-7, 2-Ethylhexanal 123-15-9, 2-Methylpentanal
 123-30-8, 4-Aminophenol 123-38-6, Propionaldehyde, biological studies
 123-72-8, Butanal 124-13-0, Octanal 137-19-9, 1,5-Dichloro-2,4-
 dihydroxybenzene 141-27-5, trans-3,7-Dimethyl-2,6-octadienal 141-86-6,
 2,6-Diaminopyridine 150-75-4, 4-Methylaminophenol 399-95-1,
 4-Amino-3-fluoro-phenol 399-96-2, 4-Amino-2-fluorophenol 533-31-3,
 3,4-Methylenedioxyphenol 533-73-3, 1,2,4-Trihydroxybenzene 542-78-9,
 Malondialdehyde 557-48-2, (E,Z)-2,6-Nonadienal 575-38-2,
 1,7-Dihydroxynaphthalene 582-17-2, 2,7-Dihydroxynaphthalene 590-86-3,
 Isopentanal 591-27-5, 3-Aminophenol 608-25-3, 1,3-Dihydroxy-2-
 methylbenzene 615-66-7, 2-Chloro-1,4-diaminobenzene 619-05-6,
 3,4-Diaminobenzoic acid 770-25-2, 3-[(2-Hydroxyethyl)amino]phenol
 1004-74-6, 2,4,5,6-Tetraaminopyrimidine 1004-75-7, 2,5,6-Triamino-4-(1H)-
 pyrimidone 1630-11-1, 1,4-Diamino-3,5-diethylbenzene 1687-53-2,
 5-Amino-2-methoxyphenol 1953-54-4, 5-Hydroxyindole 2043-61-0,
 Cyclohexanal 2359-52-6, 4-[Di(2-hydroxyethyl)amino]-2-methylaniline
 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1,
 4-Hydroxyindole 2835-95-2, 5-Amino-2-methylphenol 2835-96-3,
 4-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol 2987-16-8,
 3,3-Dimethylbutyraldehyde 3131-52-0, 5,6-Dihydroxyindole 4221-03-8,
 5-Hydroxypentanal 4318-76-7, 2,5-Diaminopyridine 5306-96-7,
 1,4-Diamino-2,3-dimethylbenzene 5349-76-8, 2,4-Diamino-1-methoxy-5-
 methylbenzene 5435-64-3, 3,5,5-Trimethylhexanal 5697-02-9,
 2-Methyl-1-naphthol-acetate 5862-80-6, 4-[(2,3-
 Dihydroxypropyl)amino]aniline 6265-21-0, 3-[(2-
 Hydroxyethyl)amino]aniline 6393-01-7, 1,4-Diamino-2,5-dimethylbenzene
 6941-70-4, 6-Bromo-1-hydroxy-3,4-methylenedioxybenzene 7218-02-2,
 1,4-Diamino-2,6-dimethylbenzene 7228-00-4, 2-[(3-
 Hydroxyphenyl)amino]acetamide 7469-77-4, 2-Methyl-1-naphthol
 7575-35-1, 4-[Di(2-hydroxyethyl)amino]aniline 7722-84-1, Hydrogen
 peroxide, biological studies 14268-66-7, 3,4-Methylenedioxyaniline
 16251-77-7, 3-Phenylbutyraldehyde 16867-03-1, 2-Amino-3-hydroxypyridine
 26011-57-4, 6-Amino-3,4-dihydro[1,4](2H)-benzoxazine 26021-57-8,
 3,4-Dihydro-6-hydroxy-1,4(2H)-benzoxazine 26455-21-0,
 N-(3-Dimethylaminophenyl)-urea 28020-38-4, 2,3-Diamino-6-methoxypyridine
 29539-03-5, 5,6-Dihydroxyindoline 29785-47-5, 4-Amino-2-
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 39489-79-7, 5-Amino-2,4-dichloro-phenol 45514-38-3, 4,5-Diamino-1-methyl-
 1H-pyrazole 53222-92-7, 3-Amino-2-methylphenol 53687-29-9
 55302-96-0, 5-[(2-Hydroxyethyl)amino]-2-methylphenol 61693-42-3,
 3-Amino-2,4-dichloro-phenol 66566-48-1, 4-[(2-Methoxyethyl)amino]aniline
 67199-87-5, 1,4-Diamino-2-aminomethylbenzene 68039-49-6,
 2,4-Dimethyl-3-cyclohexene-carboxaldehyde 70643-19-5,
 2,4-Diamino-1-(2-hydroxyethoxy)benzene 71077-37-7, 1,3-Diamino-4-(2-
 methoxyethoxy)benzene 71500-41-9, 4-Amino-2-di[(2-hydroxyethyl)amino]-1-
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 73793-80-3, 1,4-Diamino-2-hydroxymethylbenzene 75513-65-4,
 1,3-Diamino-4-(2,3-dihydroxypropoxy)benzene 76045-64-2,
 3-[(2-Aminoethyl)amino]aniline 78661-33-3, 2-Amino-1-(2-hydroxyethoxy)-4-
 methylaminobenzene 79352-72-0, 4-Amino-2-(aminomethyl)phenol
 80592-80-9, 3-[(2,3-Dihydroxypropyl)amino]-2-methylphenol 80592-81-0,

3-[(2-Hydroxyethyl)amino]-2-methylphenol 81892-72-0,
 1,3-Di(2,4-diaminophenoxy)propane 83763-47-7, 2-Amino-4-[(2-
 hydroxyethyl)amino]anisole 84540-47-6, 2,6-Dihydroxy-3,4-
 dimethylpyridine 84540-48-7, 2,4-Diaminophenoxy acetic acid
 84540-50-1, 3-Amino-2-chloro-6-methylphenol 85679-78-3,
 3,5-Diamino-2,6-dimethoxypyridine 86817-42-7, 2-(4-Amino-2-
 hydroxyphenoxy)ethanol 90817-34-8, 3-Amino-6-methoxy-2-
 (methylamino)pyridine 93841-24-8, 1,4-Diamino-2-(2-hydroxyethyl)benzene
 94082-77-6, 2,4-Diamino-1,5-di(2-hydroxyethoxy)benzene 97902-52-8,
 1,4-Diamino-2-(1-methylethyl)benzene 104333-08-6, 4-Amino-2-(2-
 hydroxyethyl)phenol 104333-09-7, 4-Amino-2-(hydroxymethyl)phenol
 104752-48-9, 4-[(3-Hydroxypropyl)amino]aniline 104752-50-3,
 1-(2-Aminoethoxy)-2,4-diaminobenzene 104752-51-4, 1,2-Dichloro-3,5-
 dihydroxy-4-methylbenzene 105293-89-8, 4-Dipropylaminoaniline
 109942-17-8, 2,5-Diaminobiphenyl 110102-86-8, 5-Amino-4-chloro-2-
 methylphenol 110952-46-0, 4-Amino-2-[(2-hydroxyethyl)amino]methylphenol
 111451-24-2, 2,6-Diamino-3,5-dimethoxypyridine 115423-86-4,
 1,3-Diamino-2,4-dimethoxybenzene 122455-85-0, 5-Amino-4-fluoro-2-
 methylphenol 122481-67-8, 2,4-Di[(2-hydroxyethyl)amino]-1,5-
 dimethoxybenzene 125109-85-5, 3-(3-Isopropylphenyl)butanal
 126335-43-1, 1,4-Diamino-2-(2-hydroxyethoxy)benzene 128729-30-6,
 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol 130582-53-5,
 1,4-Bis[(4-aminophenyl)amino]butane 137290-78-9, 5-Amino-4-methoxy-2-
 methylphenol 137290-86-9, 5-[(2-Hydroxyethyl)amino]-4-methoxy-2-
 methylphenol 139443-57-5, 5-Amino-4-ethoxy-2-methylphenol 141614-04-2,
 2,4-Diamino-1-ethoxy-5-methylbenzene 141614-05-3, 2,4-Diamino-1-(2-
 hydroxyethoxy)-5-methylbenzene 141922-20-5, 2,4-Diamino-1-fluoro-5-
 methylbenzene 142082-56-2, 3-[(2-Methoxyethyl)amino]phenol
 146658-65-3, 5-[(3-Hydroxypropyl)amino]-2-methylphenol 149330-25-6,
 2,6-Bis(2-hydroxyethyl)aminotoluene 155601-16-4, 4,5-Diamino-1-(1-
 methylethyl)-1H-pyrazole 155601-17-5, 4,5-Diamino-1-(2-hydroxyethyl)-1H-
 pyrazole 157469-54-0, 4,5-Diamino-1-[(4-methylphenyl)methyl]-1H-pyrazole
 157469-55-1, 1-[(4-Chlorophenyl)methyl]-4,5-diamino-1H-pyrazole
 159661-45-7, 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane 168092-23-7,
 Di(2,4-diaminophenoxy)methane 168202-61-7, 4-Amino-3-(hydroxymethyl)-
 phenol 207568-58-9, 2-[2-(Acetylamino)ethoxy]-1,4-diaminobenzene
 207923-07-7, 5-Amino-2-ethylphenol 244028-59-9,
 5-[(2-Hydroxyethyl)amino]-1,3-benzodioxole 244104-61-8 246244-41-7
 306959-12-6, 1,4-Diamino-2-(pyridin-3-yl)benzene 307493-94-3,
 1,3-Diamino-4-(3-hydroxypropoxy)benzene 329320-36-7,
 1,4-Diamino-2-(1-hydroxyethyl)benzene 337906-36-2, 1,4-Diamino-2-
 methoxymethylbenzene 365533-47-7 460331-12-8
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair** dyes containing aldehydes in dye solution for
 improving color intensity)

L69 ANSWER 13 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:504587 HCAPLUS
 DN 137:83379
 TI Oxidative **hair** dye **composition** for dyeing of
keratinous fibers comprising a diamino pyrazole and a carbonyl
 compound
 IN Cotteret, Jean
 PA L'oreal, Fr.
 SO PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DT Patent
 LA French

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002051373	A1	20020704	WO 2001-FR3729	20011126
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FR 2818538	A1	20020628	FR 2000-16952	20001222
	FR 2818538	B1	20030207		
	EP 1345580	A1	20030924	EP 2001-272054	20011126
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	FR 2000-16952	A	20001222		
	WO 2001-FR3729	W	20011126		
OS	MARPAT 137:83379				
AB	The invention concerns a composition for oxidation dyeing of keratinous fibers, in particular human keratinous fibers such as human hair , comprising at least an oxidation base selected among 4,5 or 3,4-diamino pyrazoles and triamino pyrazoles, associated with at least a selected mineral compound The invention also concerns a dyeing method using said composition with an oxidizing agent. A hair dye contained 4,5-diamino-1- β -hydroxyethylpyrazole.2HCl 0.645, 3-amino-6-methylphenol 0.369, urea 0.1, water and other excipients q.s. 100 g. At the time of use equal amount of dye is mixed with 20 volume hydrogen peroxide and applied on the hair for 30 min., the hair is then rinsed with water, washed with shampoo, and dried to obtain a strong red color.				
IC	ICM A61K007-13				
CC	62-3 (Essential Oils and Cosmetics)				
ST	oxidative hair dye aminopyrazole carbonyl compd				
IT	Carbohydrates, biological studies				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aldoses; oxidative hair dye composition for dyeing of keratinous fibers comprising diamino pyrazole and carbonyl compound)				
IT	Ketones, biological studies				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aliphatic; oxidative hair dye composition for dyeing of keratinous fibers comprising diamino pyrazole and carbonyl compound)				
IT	Ketones, biological studies				
	Polyimides, biological studies				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aromatic; oxidative hair dye composition for dyeing of keratinous fibers comprising diamino pyrazole and carbonyl compound)				
IT	Hair preparations				
	(dyes, oxidative; oxidative hair dye composition for dyeing of keratinous fibers comprising diamino pyrazole and carbonyl compound)				
IT	Salts , biological studies				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)				

(of peroxy acids; oxidative **hair dye composition** for dyeing of **keratinous** fibers comprising diamino pyrazole and carbonyl compound)

IT Acids, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(organic; oxidative **hair dye composition** for dyeing of **keratinous** fibers comprising diamino pyrazole and carbonyl compound)

IT Coupling agents

Human

Oxidizing agents

(oxidative **hair dye composition** for dyeing of **keratinous** fibers comprising diamino pyrazole and carbonyl compound)

IT Aldehydes, biological studies

Ketones, biological studies

Peroxy acids

Peroxy sulfates

Polyimides, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(oxidative **hair dye composition** for dyeing of **keratinous** fibers comprising diamino pyrazole and carbonyl compound)

IT Group IIIA element compounds

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(perborates; oxidative **hair dye composition** for dyeing of **keratinous** fibers comprising diamino pyrazole and carbonyl compound)

IT 57-13-6, Urea, biological studies 57-48-7, D Fructose, biological studies 67-64-1, Acetone, biological studies 89-32-7, Pyromellitic dianhydride 100-10-7, p-(Dimethylamino)benzaldehyde 124-43-6 491-38-3D, Chromone, derivs. 563-69-9, Carbonoperoxoic acid 1121-34-2, Malic anhydride 2421-28-5 2835-95-2, 3-Amino-6-methylphenol 3142-58-3 5751-48-4, 2-Methyl chromone 6915-15-7, Malic acid 7722-84-1, Hydrogen peroxide, biological studies 16461-98-6, 1H-Pyrazole-3,4-diamine 25036-53-7, Kapton H 45514-38-3 52943-88-1 57047-11-7 63536-19-6 70254-61-4 76492-69-8 76492-70-1 78467-10-4 78467-17-1 89868-34-8 96886-30-5 103245-13-2 103245-14-3 103245-15-4 103245-16-5 103245-17-6 103245-18-7 103245-19-8 103245-23-4 118020-67-0, 1H-Pyrazole-3,4,5-triamine 122128-84-1 131311-66-5 132026-21-2 132026-22-3 132026-41-6 132026-42-7 132026-43-8 132026-44-9 132026-45-0 132026-72-3 132026-73-4 132026-83-6 148777-82-6 153940-62-6 153990-63-7 153990-64-8 153990-65-9 153990-66-0 153990-67-1 153990-68-2 153990-69-3 153990-70-6 153990-71-7 155601-15-3 155601-16-4 155601-17-5 155601-18-6 155601-24-4 157469-53-9 157469-54-0 157469-55-1 157469-56-2 157469-57-3 157469-58-4 184172-85-8 184172-94-9 184172-95-0 184172-96-1 184172-97-2 184172-98-3 184172-99-4 184173-00-0 184173-01-1 184173-02-2 184173-03-3 184173-04-4 184173-05-5 184173-06-6 184173-07-7 184173-08-8 184173-09-9 184173-10-2 184173-11-3 184173-12-4 184173-13-5 184173-14-6 184173-15-7 184173-16-8 184173-17-9 184173-18-0 184173-19-1 184173-20-4 184173-21-5 184173-22-6 184173-23-7 184173-24-8 184173-25-9 184173-26-0 184173-27-1 184173-28-2 184173-29-3 184173-30-6 184173-31-7 184173-32-8 184173-33-9 184173-34-0 184173-35-1 184173-36-2 184173-37-3 184173-38-4 184173-39-5 184173-40-8 184173-41-9 184173-42-0 184173-43-1 184173-45-3 184173-46-4 184173-47-5 184173-48-6 191731-06-3

191731-07-4 191731-08-5 351184-15-1 439902-00-8 439902-01-9
 439902-02-0 439902-03-1 439902-04-2 439902-05-3 439902-06-4
 439902-46-2

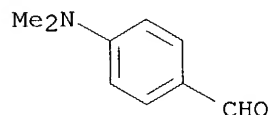
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair dye composition** for dyeing of
keratinous fibers comprising diamino pyrazole and carbonyl
 compound)

IT 100-10-7, p-(Dimethylamino)benzaldehyde

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative **hair dye composition** for dyeing of
keratinous fibers comprising diamino pyrazole and carbonyl
 compound)

RN 100-10-7 HCAPLUS

CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 14 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:391484 HCAPLUS

DN 136:390731

TI Quaternary ammonium salts as couplers for use in oxidative hair dyeing

IN Lim, Mu-Ill; Pan, Yuh-Guo; Popp, Margaret

PA Clairol Incorporated, USA

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

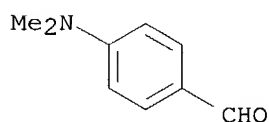
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002039968	A1	20020523	WO 2001-US43763	20011116
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
	RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,				
	VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002016712	A5	20020527	AU 2002-16712	20011116
	US 2002102224	A1	20020801	US 2001-993210	20011116
	US 6589295	B2	20030708		
	EP 1333793	A1	20030813	EP 2001-996353	20011116
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-249831P	P	20001117		
	WO 2001-US43763	W	20011116		
OS	MARPAT 136:390731				
AB	Quaternary ammonium salts are prepared as couplers for hair coloring				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

compns. for oxidative dyeing of hair. Solns. of the primary intermediate and a coupler were prepared sep. according to the following procedure. The concentration of both the primary intermediate (4-aminophenol, p-phenylenediamine, and p-toluenediamine) and the coupler [4-[(3-hydroxy-4-methylphenylamino)methyl]phenyl]trimethylammonium chloride (preparation given) was 0.025M, each in a base consisting of ethanol 7.85 g, sodium laureth sulfate 10 g, ascorbic acid 0.3 g, EDTA 0.3 g, ammonium hydroxide 8.13 g (28%), and water to 100 g. A solution of the primary intermediate (0.5 mL) and the coupler (0.5 mL) was mixed with 1 mL of 20 volume hydrogen peroxide. The **mixture** was applied to piedmont hair tresses mounted on a glass plate and then stored at 40° for 30 min, washed, shampooed, washed, and dried.

- IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 25
 IT Hair preparations
 (dyes, oxidative; oxidative hair dye **compns.** containing quaternary ammonium salts as couplers)
 IT Oxidizing agents
 (oxidative hair dye **compns.** containing quaternary ammonium salts as couplers)
 IT Quaternary ammonium compounds, biological studies
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (oxidative hair dye **compns.** containing quaternary ammonium salts as couplers)
 IT Human
 (oxidative hair dye **compns.** containing quaternary ammonium salts as couplers for human hair)
 IT 90-15-3, Naphthalen-1-ol 95-55-6, 2-Aminophenol 95-70-5, 2-Methylbenzene-1,4-diamine 95-88-5, 4-Chlorobenzene-1,3-diol 106-50-3, Benzene-1,4-diamine, biological studies 108-45-2, m-Phenylenediamine, biological studies 108-46-3, Benzene-1,3-diol, biological studies 123-30-8, 4-Aminophenol 150-75-4, 4-Methylaminophenol 591-27-5, 3-Aminophenol 608-25-3, 2-Methylbenzene-1,3-diol 1004-74-6, Pyrimidinetetramine 2380-86-1, 1H-Indol-6-ol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 7469-77-4, 2-Methylnaphthalen-1-ol 7575-35-1 16867-03-1, 2-Aminopyridin-3-ol 17672-22-9, 2-Amino-6-methylphenol 26021-57-8, 3,4-Dihydro-2H-1,4-benzoxazin-6-ol 41927-22-4, 4-Methyl-2-phenyl-2,4-dihydro-3H-pyrazol-3-one 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-(2-Hydroxyethylamino)-2-methylphenol 70643-19-5, 2-(2,4-Diaminophenoxy)ethanol 83763-47-7 93841-24-8 94082-77-6 129697-50-3 131311-66-5 155601-17-5 157469-54-0 220264-60-8 307493-94-3, 3-(2,4-Diaminophenoxy)propan-1-ol 329320-36-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dye **compns.** containing quaternary ammonium salts as couplers)
 IT 2835-95-2, 5-Amino-2-methylphenol
 RL: COS (Cosmetic use); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
 (oxidative hair dye **compns.** containing quaternary ammonium salts as couplers)
 IT 100-10-7, 4-Dimethylaminobenzaldehyde
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative hair dye **compns.** containing quaternary ammonium salts as couplers)

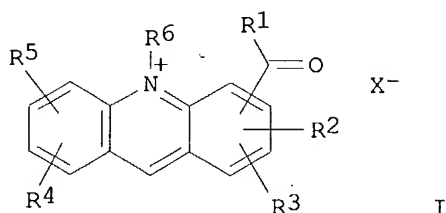
IT 426211-38-3P 426211-39-4P 426211-40-7P 426211-41-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (oxidative hair dye **compns.** containing quaternary ammonium salts
 as couplers)
 IT 16940-66-2, Sodium borohydride 25895-60-7, Sodium cyanoborohydride
 56553-60-7, Sodium triacetoxyborohydride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reducing agent; oxidative hair dye **compns.** containing quaternary
 ammonium salts as couplers)
 IT **100-10-7**, 4-Dimethylaminobenzaldehyde
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative **hair** dye **compns.** containing quaternary
 ammonium salts as couplers)
 RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 15 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:271799 HCAPLUS
 DN 136:299454
 TI Oxidative hair dyes containing acridine aldehydes and acridine ketones
 IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst
 PA Henkel K.-G.A.a., Germany
 SO Ger. Offen., 14 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10047480	A1	20020411	DE 2000-10047480	20000926
PRAI	DE 2000-10047480		20000926		
OS	MARPAT 136:299454				
GI					



AB The invention concerns the synthesis of acridine aldehyde and acridine ketone derivs. and their application in oxidative hair dyes. Compds. of the general formula (I) are defined, where R1 = hydrogen atom, C1-4-Alkyl or group of aryls; R2, R3, R4 and a R5, same or different = a hydrogen atom, halogen atom, a C1-C4-Alkyl, C1-C4-Hydroxyalkyl, C1-C4-Alkoxy, C1-C4-Hydroxyalkoxy, hydroxy group, nitro group, sulfo group, amino group, which can be substituted by C1-C4-Alkyl, or a C1-C4-Acyl, whereby two of the groups can form a condensed aromatic ring, whereby the groups of COR1, R2, R3, R4 and R5 to any ring of the cyclic system; X- an anion, in particular halide, sulfonate, like benzene sulfonate, p-Toluene sulfonate, methanesulfonate or trifluoro methanesulfonate, Me sulfate, Et sulfate, perchlorate, sulfate, hydrogensulfate, tetrafluoroborate or tetrachlorozincate, alkanoate, whereby X- is absent if R6 is neg. charged; R6 = hydrogen atom, C1-4-Alkyl, C1-C4-Hydroxyalkyl, C1-C6 carboxyalkyl, C1-C6 sulfoalkyl, C1-4-aralkyl, heteroalkyl, neg. charged oxygen. Thus 9-formyl-10-methylacridinium-p-toluene sulfonate was synthesized from acridine-9-carboxaldehyde and p-toluene sulfonic acid Me ester. The product was used in **combination** with 3-methyl-p-aminophenol to yield a light brown hair color.

IC ICM A61K007-13

ICS C07D219-02; C09B015-00

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 27

IT Nitriles, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(**aromatic; oxidative hair dyes containing acridine aldehydes and acridine ketones**)

IT 56-87-1, L-Lysine, biological studies 59-48-3, Oxindole 59-92-7, DOPA, biological studies 60-18-4, L-Tyrosine, biological studies 62-53-3, Aniline, biological studies 63-91-2, L-Phenylalanine, biological studies 65-49-6, 4-Aminosalicylic acid 67-52-7, Barbituric acid 70-18-8, L-Glutathione, biological studies 70-26-8, Ornithine 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophane, biological studies 74-79-3, L-Arginine, biological studies 77-32-7 83-30-7, 2,4,6-Trihydroxybenzoic acid 83-33-0, Indan-1-one 83-56-7, 1,5-Dihydroxynaphthalene 84-65-1, Anthraquinone 87-02-5, 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-66-1, Pyrogallol 88-21-1, 2-Aminobenzene sulfonic acid 88-74-4, 2-Nitroaniline 89-57-6, 5-Aminosalicylic acid 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1, 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-hydroxynaphthalene-2,7-disulfonic acid 91-29-2, 4'-Amino-4-nitrodiphenylamine-2-sulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene 92-65-9, N-(2-Hydroxyethyl)-N-ethyl-p-phenylenediamine 95-54-5, o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5, 2,5-Diaminotoluene 95-88-5, 4-Chlororesorcin 96-91-3, Picramic acid 96-93-5, 3-Amino-4-hydroxy-5-nitrobenzene sulfonic acid 98-37-3, 3-Amino-4-hydroxybenzene sulfonic acid 98-79-3, Pyrrolidone-5-carboxylic acid 99-05-8, 3-Aminobenzoic acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid 99-50-3, 3,4-Dihydroxybenzoic acid 99-56-9, 1,2-Diamino-4-nitrobenzene 100-01-6, 4-Nitroaniline, biological studies 101-77-9, 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diamino-diphenyl ether 106-50-3, p-Phenylenediamine, biological studies 108-45-2, m-Phenylenediamine, biological studies 108-46-3, Resorcin, biological studies 108-72-5, 1,3,5-Triaminobenzene 108-73-6, Phloroglucine 109-00-2, 3-Hydroxypyridine 110-85-0, Piperazidine, biological studies 110-86-1, Pyridine, biological studies 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 118-70-7, 4,5,6-Triamino pyrimidine

118-92-3, 2-Aminobenzoic acid 119-34-6, 4-Amino-2-nitrophenol
 119-59-5, 4,4'-Diaminodiphenyl sulfoxide 119-70-0, 4,4'-
 Diaminodiphenylamine-2-sulfonic acid 120-72-9D, Indole, derivs.
 121-47-1, 3-Aminobenzene sulfonic acid 121-57-3, 4-Aminobenzene sulfonic
 acid 123-30-8, 4-Aminophenol 123-31-9, Hydroquinone, biological
 studies 123-75-1, Pyrrolidine, biological studies 139-65-1,
 4,4'-Diaminodiphenyl sulfide 141-84-4, Rhodanine 141-86-6, 2,6-Diamino
 pyridine 142-08-5, 2-Hydroxypyridine 147-85-3, L-Proline, biological
 studies 149-91-7, Gallic acid, biological studies 150-13-0,
 4-Aminobenzoic acid 150-19-6, 3-Methoxyphenol 150-76-5, 4-Methoxy
 phenol 156-81-0, 2,4-Diaminopyrimidine 260-94-6D, Acridine, derivs.
 288-13-1, Pyrazole 288-32-4, Imidazole, biological studies 288-88-0,
 1H-1,2,4-Triazole 452-58-4, 2,3-Diamino pyridine 462-08-8, 3-Amino
 pyridine 480-66-0 488-87-9, 2,5-Dimethylresorcin 496-15-1D,
 Indoline, derivs. 496-73-1, 4-Methylresorcin 498-94-2,
 Piperidine-4-carboxylic acid 504-15-4 504-17-6, Thiobarbituric acid
 504-24-5, 4-Amino pyridine 504-29-0, 2-Amino pyridine 517-22-6,
 2,4-Dimethyl-3-ethylpyrrole 533-31-3, 3,4-Methylenedioxyphenol
 533-73-3, Hydroxyhydroquinone 535-75-1, Piperidine-2-carboxylic acid
 535-87-5, 3,5-Diaminobenzoic acid 537-65-5, 4,4'-Diaminodiphenyl amine
 553-86-6, Cumaranone 556-03-6, Tyrosine 570-24-1, 6-Nitro-o-toluidine
 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline
 580-22-3, 2-Aminoquinoline 582-17-2, 2,7-Dihydroxynaphthalene
 591-27-5, 3-Aminophenol 603-81-6, 2,3-Diaminobenzoic acid 606-23-5,
 1H-Indene-1,3(2H)-dione 606-55-3 606-57-5, 2-Amino-1-nitronaphthalene
 608-08-2, 3-Indoxylacetate 608-25-3, 2-Methylresorcin 610-74-2,
 2,5-Diaminobenzoic acid 610-81-1, 4-Amino-3-nitrophenol 611-03-0,
 2,4-Diaminobenzoic acid 611-98-3, 4,4'-Diaminobenzophenone 615-66-7,
 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene 616-45-5,
 Pyrrolidone 616-47-7, 1-Methylimidazole 619-05-6, 3,4-Diaminobenzoic
 acid 623-09-6, 4-Methylaminoaniline 626-64-2, 4-Hydroxypyridine
 636-25-9, 2,5-Diaminophenol 876-87-9 1004-74-6, 2,4,5,6-
 Tetraaminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine
 1123-55-3, 7-Amino-benzothiazole 1125-60-6, 5-Aminoisoquinoline
 1197-55-3, 4-Amino-phenylacetic acid 1455-77-2, 3,5-Diamino-1,2,4-
 triazole 1571-72-8, 3-Amino-4-hydroxybenzoic acid 1820-80-0,
 3-Aminopyrazole 2374-03-0, 4-Amino-3-hydroxybenzoic acid 2380-84-9,
 7-Hydroxyindole 2510-01-2 2654-52-6, 2,3-Dimethylbenzothiazolium-p-
 toluene sulfonate 2785-06-0, 2,3-Dimethylbenzothiazoliumiodide
 2835-95-2, 2-Methyl-5-aminophenol 2835-99-6, 3-Methyl-p-aminophenol
 2871-01-4, HC Red 3 3131-52-0, 5,6-Dihydroxyindole 3158-63-2,
 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid
 3301-75-5, Benz[c]acridine-7-carboxaldehyde 3769-62-8, Gallion
 3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7, 2,5-Diamino pyridine
 4331-29-7, 7-Aminobenzimidazole 4506-66-5, 1,2,4,5-Tetraaminobenzene-
 tetrahydrochloride 4928-43-2, 2-Dimethylamino-5-amino pyridine
 5007-67-0, 3,3',4,4'-Tetraaminobenzophenone 5099-39-8,
 2-[2-(Diethylamino)ethylamino]-5-nitroaniline 5131-58-8 5192-03-0,
 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole
 5217-47-0, 1,3-Diethylthiobarbituric acid 5307-14-2,
 1,4-Diamino-2-nitrobenzene 5318-27-4, 6-Aminoindole 5418-63-3,
 1,2,3,3-Tetramethyl-3H-indoliumiodide 5434-20-8, 3-Aminophthalic acid
 5718-83-2, Rhodanine-3-acetic acid 5850-35-1, Acid blue 29 5930-28-9,
 2,6-Dichloro-4-aminophenol 5959-52-4, 3-Amino-2-naphthoic acid
 6201-65-6, 2-Chlororesorcin 6222-46-4, Palatine chrome green GC
 6247-27-4, Mordant brown 4 6259-50-3, 6-Dimethylamino-4-hydroxy-2-
 naphthalene sulfonic acid 6358-09-4, 2-Amino-6-chloro-4-nitrophenol
 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-sulfonic acid 6628-04-2,

4-Aminoquinaldine 6634-82-8, 4-Amino-4'-nitrostilbene-2,2'-disulfonic acid disodium salt 6967-12-0, 6-Aminoindazole 7074-03-5 7336-20-1 7411-49-6, [1,1'-Biphenyl]-3,3',4,4'-tetramine, tetrahydrochloride 7722-84-1, Hydrogen peroxide, biological studies 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine 7768-28-7, 2-(2-Hydroxyethyl)phenol 10173-66-7, 1-Amino-4-nitro-2-(2-nitrobenzylideneamino)benzene 10228-97-4 13754-19-3, 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline 16082-33-0, 3,5-Diaminopyrazole 16859-86-2, 1,4-Dimethylquinolinium-iodide 16867-03-1, 2-Amino-3-hydroxypyridine 19335-11-6, 5-Aminoindazole 20103-09-7, 2,5-Dichloro-p-phenylenediamine 22715-34-0, 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3, 2,4,5-Triaminopyridine 23894-07-7, 3,6-Dihydroxy-2,7-naphthalene disulfonic acid 24119-24-2, N,N-Bis-[2-(4-aminophenoxy)ethyl]methylamine, trihydrochloride 24905-87-1, HC Red 7 28020-38-4, 2,3-Diamino-6-methoxypyridine 29705-39-3 31835-64-0, 3-Amino-3'-nitrobiphenyl 31905-57-4, Nitrophenylenediamine 41927-50-8 42952-29-4, 1-Ethyl-2-methylnaphtho[1,2-d]thiazolium-p-toluene sulfonate 43093-74-9, Phenol, aminonitro- 46791-37-1 50610-28-1 51387-92-9, Phenol, 4-amino-2-[(diethylamino)methyl]- 54381-16-7, N,N-Bis(2-hydroxyethyl)-p-phenylenediamine sulfate 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)-phenol 56932-44-6, HC Yellow 5 58480-17-4, 1,2-Dimethylnaphtho[1,2-d]thiazolium-p-toluene sulfonate 61224-35-9, 1,2,3,3-Tetramethyl-3H-indolium-p-toluene sulfonate 61693-42-3, 3-Amino-2,4-dichloro phenol 62496-02-0, 2-Methylamino-4,5,6-triamino-pyrimidine 63969-46-0, Bis(5-amino-2-hydroxyphenyl)methane 64993-07-3, 5-Amino-6-nitrobenzo-1,3-dioxole 66635-40-3, 4,4'-Diaminostilbene-dihydrochloride 68391-32-2 69825-83-8, 6-Nitro-2,5-diaminopyridine 70643-19-5, 2,4-Diaminophenoxyethanol 74586-24-6 74918-21-1, 1,3-Bis(2,4-diaminophenoxy)propane, tetrahydrochloride 77484-77-6, 3-Amino-6-methylamino-2-nitropyridine 79352-72-0, 4-Amino-2-aminomethylphenol 82576-75-8, HC Violet 1 83763-47-7, 2-Amino-4-(2-hydroxyethylamino)anisole 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine 84540-50-1, 6-Methyl-3-amino-2-chloro phenol 85679-78-3, 3,5-Diamino-2,6-dimethoxypyridine 85926-99-4, 4-Hydroxyindoline 90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 93923-57-0 95576-89-9, HC Red 10 104333-09-7, 2-Hydroxymethyl-4-aminophenol 110102-86-8, 2-Methyl-5-amino-4-chloro phenol 110952-48-2, Phenol, 4-amino-2-[(dimethylamino)methyl]- 113139-13-2, Acridine-1-carboxaldehyde 113139-14-3, Acridine-2-carboxaldehyde 113139-15-4, Acridine-3-carboxaldehyde 113139-16-5, Acridine-4-carboxaldehyde
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes containing acridine aldehydes and acridine ketones)

L69 ANSWER 16 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:935367 HCAPLUS

DN 136:58508

TI **Hair dye compositions** containing
 cyclopentaquinoxalinium derivatives

IN Oberkobusch, Doris; Hoeffkes, Horst; Moeller, Hinrich; Martin,
 Hans-Dieter; Gross, Wibke

PA Henkel Kommanditgesellschaft auf Aktien, Germany

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

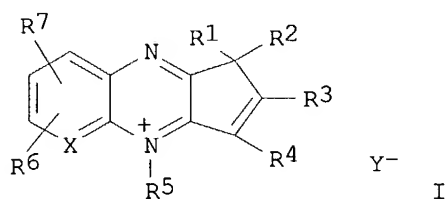
DT Patent

LA German

FAN.CNT 1

KATHLEEN FULLER EIC 1700 . REMSEN 4B28 571/272-2505

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001097765	A1	20011227	WO 2001-EP6691	20010613
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	DE 10029441	A1	20020103	DE 2000-10029441	20000621
	EP 1292269	A1	20030319	EP 2001-945274	20010613
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
PRAI	DE 2000-10029441	A	20000621		
	WO 2001-EP6691	W	20010613		
OS	MARPAT 136:58508				
GI					



AB THair dye **compns.** contain at least 1 cyclopentaquinoxalini-1-ium derivative (I, R1, R2, R3, R4 = e.g., H or C1-4 alkyl,, R5 = C1-4 alkyl,, aryl, C2-4 alkenyl, C1-4 hydroxyalkyl or C1-4 carboxyalkyl, X = CH or N, R6 and R7 = H halo, OH, NH2 C1-4 alkylamino, C1-4 alkyl or alkoxy, NO2, CO2H or SO3H, and Y- = halo, benzenesulfonate, p-toluenesulfonate, methanesulfonate, methylsulfate, ethylsulfate, trifluoromethane). Thus, 5-aza-6-methoxy-1,1,2,3,4-pentamethyl-1H-cyclopenta(b)quinoxalini-1-ium tetrafluoroborate (II) was prepared in a series of steps and formulated into a **hair dye composition** containing II 7.14, Natrosol 250HR 2.0, and water to 100 g.

IC ICM A61K007-13
ICS C07D471-04; C07D241-38

CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 28

ST **hair dye** cyclopentaquinoxalini-1-ium prepn

IT Surfactants
(anionic; **hair dye compns.** containing cyclopentaquinoxalini-1-ium derivs.)

IT **Aldehydes**, biological studies
Ketones, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(aromatic; **hair dye compns.** containing cyclopentaquinoxalini-1-ium derivs.)

IT **Hair preparations**
(dyes; **hair dye compns.** containing cyclopentaquinoxalini-1-ium derivs.)

IT Aldehydes, biological studies
Ketones, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(heteroaryl; **hair dye compns.** containing

cyclopentaquinoxalinium derivs.)

IT Surfactants
(nonionic; **hair dye compns.** containing cyclopentaquinoxalinium derivs.)

IT Surfactants
(zwitterionic; **hair dye compns.** containing cyclopentaquinoxalinium derivs.)

IT 71-00-1, L-Histidine, biological studies 89-84-9 90-02-8, biological studies 93-02-7 95-01-2 99-93-4 **100-10-7** 100-83-4
109-00-2, 3-Pyridinol 110-85-0, Piperazine, biological studies
110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 118-93-4 120-14-9 120-57-0, 1,3-Benzodioxole-5-carboxaldehyde 121-33-5 123-08-0 123-11-5, biological studies
123-75-1, Pyrrolidine, biological studies 135-02-4 139-85-5
142-08-5, 2(1H)-Pyridinone 147-85-3, L-Proline, biological studies
149-87-1 288-13-1, 1H-Pyrazole 288-32-4, 1H-Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole 458-36-6 487-70-7 498-94-2, 4-Piperidinecarboxylic acid 498-95-3, 3-Piperidinecarboxylic acid
535-75-1, 2-Piperidinecarboxylic acid 574-96-9 591-31-1 613-45-6
613-84-3 616-45-5, 2-Pyrrolidinone 616-47-7 621-59-0 626-64-2, 4-Pyridinol 698-27-1 708-06-5 824-42-0 1080-12-2 1194-98-5
1971-81-9 2144-08-3 2233-18-3 2420-16-8 2538-87-6
3160-35-8 3392-97-0 3541-42-2 3934-87-0 5392-12-1
6203-18-5 7770-45-8 10031-82-0 13677-79-7 15174-69-3
15971-29-6 24677-78-9 26153-38-8 27394-81-6 35094-87-2
55745-70-5 79407-66-2 87345-53-7 382145-24-6
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**hair dye compns.** containing cyclopentaquinoxalinium derivs.)

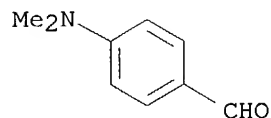
IT 380897-53-0DP, **salts** 380897-54-1P 382145-15-5DP, **salts** 382145-16-6P 382145-17-7DP, **salts** 382145-19-9DP, **salts** 382145-20-2DP, **salts** 382145-21-3DP, **salts** 382145-22-4DP, **salts** 382145-23-5DP, **salts**
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**hair dye compns.** containing cyclopentaquinoxalinium derivs.)

IT 78-92-2, 2-Butanol 541-47-9 17190-21-5 90817-34-8 380897-52-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(**hair dye compns.** containing cyclopentaquinoxalinium derivs.)

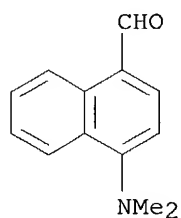
IT 30434-70-9P 79699-69-7P 109892-46-8P 380897-50-7P 380897-51-8P 382145-18-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**hair dye compns.** containing cyclopentaquinoxalinium derivs.)

IT **100-10-7 1971-81-9 6203-18-5**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**hair dye compns.** containing cyclopentaquinoxalinium derivs.)

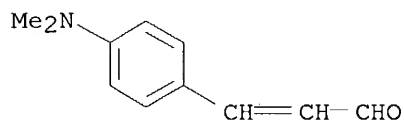
RN 100-10-7 HCAPLUS
CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 1971-81-9 HCAPLUS
 CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 6203-18-5 HCAPLUS
 CN 2-Propenal, 3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 17 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:868163 HCAPLUS

DN 136:10881

TI **Hair** dyes containing derivatives of **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone

IN Moeller, Hinrich; Oberkobusch, Doris; Hoeffkes, Horst

PA Henkel Kommanditgesellschaft auf Aktien, Germany

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

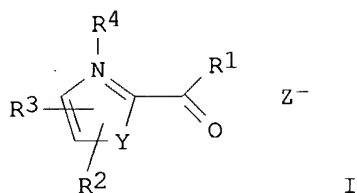
DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001089460	A2	20011129	WO 2001-EP5497	20010515
	WO 2001089460	A3	20020620		
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	DE 10025672	A1	20011129	DE 2000-10025672	20000524
PRAI	DE 2000-10025672	A	20000524		
OS	MARPAT 136:10881				
GI					

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505



AB The invention concerns **hair** dyes that contain **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone derivs. of the general formula (I), and a second dye that contains amino or hydroxy groups; the **comps.** color **hair** without the addition of oxidative agents. In formula I R represents a hydrogen atom, a C-C alkyl group, C-C sulfoalkyl group, C-C carboxyalkyl group, aryl group or heteroaryl group, R and R represent a hydrogen atom, halogen atom, a C-C alkyl group, a C-C alkoxy group, a C-C hydroxyalkoxy group, a C-C hydroxyalkyl group, a hydroxy group, a nitro group or an amino group, which can be substituted by C-C alkyl groups that can also form a heterocyclic ring together with the nitrogen atom, whereby the two groups R and R can together form a condensed aromatic ring, R represents a C-C alkyl group, C-C alkenyl group, aryl group, aralkyl group, C-C carboxyalkyl group or C-C sulfoalkyl group, Y represents an NR group, whereby R is a C-C alkyl group, aralkyl group or aryl group, an oxygen atom, sulfur atom or an optionally substituted methylene group, and Z- represents an anion, in particular halide, benzene sulfonate, p-toluene sulfonate, methane sulfonate, Me sulfate, Et sulfate, trifluoromethane sulfonate, perchlorate, sulfate, hydrogen sulfate, tetrafluoroborate or tetrachlorozincate. The compds. of formula I can also be present as acetals or oximes. Thus 1,3-dimethyl-2-formyl-benzimidazolium methanesulfonate was synthesized from 2-formyl-1-methylbenzimidazole and methanesulfonic acid methylester. The product was used with 3-amino-2-methylamino-6-methoxypyridine for dyeing **hair**.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST **hair** dye **quaternized** heteroaryl aldehyde ketone

IT **Ketones**, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(aromatic, heteroaryl; **hair** dyes containing derivs. of **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT **Hair** preparations

(dyes; **hair** dyes containing derivs. of **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT pH

(**hair** dyes containing derivs. of **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT Acetals

Carbonates, biological studies

Caseins, biological studies

Elastins

Halides

Keratins

Oximes

Phosphates, biological studies

Sulfates, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hair dyes containing derivs. of **quaternized**
 heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT Aldehydes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (heteroaryl; hair dyes containing derivs. of **quaternized**
 heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT Proteins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (soybean; hair dyes containing derivs. of **quaternized**
 heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT 6247-27-4, Mordant Brown 4
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (Mordant Brown 4; hair dyes containing derivs. of
quaternized heteroarom. aldehyde and/or a **quaternized**
 heteroarom. ketone)

IT 346684-81-9
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (Palatine Chrome Green; hair dyes containing derivs. of
quaternized heteroarom. aldehyde and/or a **quaternized**
 heteroarom. ketone)

IT 50-21-5, Lactic acid, biological studies 56-87-1, L-Lysine, biological
 studies 59-48-3, Oxindol 59-92-7, DOPA, biological studies 60-18-4,
 L-Tyrosine, biological studies 63-91-2, L-Phenylalanine, biological
 studies 64-18-6D, Formic acid, derivs. 64-19-7, Acetic acid,
 biological studies 67-52-7, Barbituric acid 70-26-8, L-Ornithine
 71-00-1, L-Histidine, biological studies 73-22-3, L-Tryptophane,
 biological studies 74-79-3, L-Arginine, biological studies 77-32-7
 77-92-9, biological studies 79-09-4, Propanoic acid, biological studies
 79-14-1, Glycolic acid, biological studies 83-30-7, 2,4,6-
 Trihydroxybenzoic acid 83-56-7, 1,5-Dihydroxynaphthalene 87-02-5,
 7-Amino-4-hydroxynaphthalene-2-sulfonic acid 87-69-4, biological studies
 88-74-4, 2-Nitroaniline 89-86-1, 2,4-Dihydroxybenzoic acid 90-05-1,
 2-Methoxyphenol 90-15-3, 1-Naphthol 90-20-0, 4-Amino-5-
 hydroxynaphthalene-2,7-disulfonic acid 91-29-2, 4'-Amino-4-
 nitrodiphenylamine-2-sulfonic acid 92-44-4, 2,3-Dihydroxynaphthalene
 92-65-9, N-(2-Hydroxyethyl)-N-ethyl-p-phenylenediamine 95-54-5,
 o-Phenylenediamine, biological studies 95-55-6, 2-Aminophenol 95-70-5,
 2,5-Diaminotoluene 95-88-5, 4-Chlororesorcin 96-93-5,
 3-Amino-4-hydroxy-5-nitrobenzene sulfonic acid 98-37-3,
 3-Amino-4-hydroxybenzene sulfonic acid 98-79-3, Pyrrolidone-5-carboxylic
 acid 98-86-2, Acetophenon, biological studies 99-05-8, 3-Aminobenzoic
 acid 99-07-0, 3-Dimethylaminophenol 99-31-0, 5-Aminoisophthalic acid
 99-50-3, 3,4-Dihydroxybenzoic acid 99-56-9, 1,2-Diamino-4-nitrobenzene
 100-01-6, 4-Nitroaniline, biological studies 101-77-9,
 4,4'-Diaminodiphenylmethane 101-80-4, 4,4'-Diaminodiphenyl ether
 103-82-2, 2-Phenylacetic acid, biological studies 106-50-3,
 p-Phenylenediamine, biological studies 107-92-6D, Butyric acid, derivs.
 108-45-2, m-Phenylenediamine, biological studies 108-72-5,
 1,3,5-Triaminobenzene 109-00-2, 3-Hydroxypyridine 110-86-1, Pyridine,
 biological studies 110-89-4, Piperidine, biological studies 118-12-7,
 1,3,3-Trimethyl-2-methyleneindoline 118-70-7, 4,5,6-Triaminopyrimidine

118-92-3, 2-Aminobenzoic acid 119-34-6, 4-Amino-2-nitrophenol
 119-70-0, 4,4'-Diaminodiphenylamine-2-sulfonic acid 121-57-3,
 4-Aminobenzene sulfonic acid 123-30-8, 4-Aminophenol 141-84-4,
 Rhodanine 141-86-6, 2,6-Diamino-pyridine 142-08-5, 2-Hydroxypyridine
 142-62-1, Hexanoic acid, biological studies 150-13-0, 4-Aminobenzoic
 acid 150-19-6, 3-Methoxyphenol 150-75-4, 4-Methylaminophenol
 150-76-5, 4-Methoxyphenol 156-81-0, 2,4-Diaminopyrimidine 288-32-4,
 Imidazole, biological studies 288-88-0, 1H-1,2,4-Triazole 452-58-4,
 2,3-Diamino-pyridine 462-08-8, 3-Amino-pyridine 488-87-9,
 2,5-Dimethylresorcin 496-73-1, 4-Methylresorcin 498-94-2,
 Piperidine-4-carboxylic acid 504-15-4 504-17-6, Thiobarbituric acid
 504-24-5, 4-Amino-pyridine 504-29-0, 2-Amino-pyridine 517-22-6,
 2,4-Dimethyl-3-ethylpyrrole 526-95-4, D-Gluconic acid 533-31-3,
 3,4-Methylenedioxyphenol 535-75-1, Piperidine-2-carboxylic acid
 553-86-6, Cumaranone 570-24-1, 6-Nitro-o-toluidine 578-66-5, 8-
Aminoquinoline 580-17-6, 3-**Aminoquinoline** 580-22-3,
 2-**Aminoquinoline** 582-17-2, 2,7-Dihydroxynaphthalene
 591-27-5, 3-Aminophenol 606-55-3 606-57-5, 2-Amino-1-nitronaphthalene
 608-08-2, 3-Indoxylacetate 608-25-3, 2-Methylresorcin 609-20-1,
 1,4-Benzenediamine, 2,6-dichloro- 611-98-3, 4,4'-Diaminobenzophenone
 615-66-7, 2-Chloro-p-phenylenediamine 615-71-4, 1,2,4-Triaminobenzene
 616-47-7, 1-Methylimidazole 623-09-6, 4-Methylaminoaniline 626-64-2,
 4-Hydroxypyridine 636-25-9, 2,5-Diaminophenol 934-22-5,
 5-Aminobenzimidazole 1004-74-6, 2,4,5,6-Tetraaminopyrimidine
 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 1123-55-3,
 7-Aminobenzothiazole 1123-93-9, 5-Aminobenzothiazole 1125-60-6, 5-
Aminoisoquinoline 1820-80-0, 3-Aminopyrazole 1953-54-4,
 5-Hydroxyindole 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole
 2380-94-1, 4-Hydroxyindole 2654-52-6, 2,3-Dimethylbenzothiazolium-p-
 toluene sulfonate 2785-06-0, 2,3-Dimethylbenzothiazolium iodide
 2835-95-2, 2-Methyl-5-aminophenol 2835-99-6, 3-Methyl-4-aminophenol
 2871-01-4, HC Red 3 3131-52-0, 5,6-Dihydroxyindole 3158-63-2,
 1,3-Dimethylthiobarbituric acid 3167-49-5, 6-Aminonicotinic acid
 3769-62-8, Gallion 3855-78-5, 2,3,4-Trimethylpyrrole 4318-76-7,
 2,5-Diamino-pyridine 4331-29-7, 7-Aminobenzimidazole 4506-66-5,
 1,2,4,5-Tetraaminobenzene-tetrahydrochloride 4928-43-2,
 2-Dimethylamino-5-amino-pyridine 5007-67-0, 3,3',4,4'-
 Tetraaminobenzophenone 5131-58-8 5192-03-0, 5-Aminoindole 5192-04-1,
 7-Aminoindole 5192-23-4, 4-Aminoindole 5217-47-0, 1,3-
 Diethylthiobarbituric acid 5307-14-2, 1,4-Diamino-2-nitrobenzene
 5318-27-4, 6-Aminoindole 5345-47-1, 2-Aminonicotinic acid 5418-63-3,
 1,2,3,3-Tetramethyl-3H-indoliumiodide 5434-20-8, 3-Aminophthalic acid
 5718-83-2, Rhodanine-3-acetic acid 5850-35-1, Acid blue 29 5930-28-9,
 2,6-Dichloro-4-aminophenol 5959-52-4, 3-Amino-2-naphthoic acid
 6126-22-3 6201-65-6, 1,3-Benzenediol, 2-chloro- 6259-50-3,
 6-Dimethylamino-4-hydroxy-2-naphthalene sulfonic acid 6358-09-4,
 2-Amino-6-chloro-4-nitrophenol 6399-72-0, 6-Amino-7-hydroxynaphthalene-2-
 sulfonic acid 6628-04-2, 4-Aminoquinaldine 6634-82-8,
 4-Amino-4'-nitrostilbene-2,2'-disulfonic acid, disodium **salt**
 6967-12-0, 6-Aminoindazole 7336-20-1 7411-49-6 7429-90-5D, Aluminum,
salts 7439-89-6D, Iron, **salts** 7439-93-2D, Lithium,
salts 7439-95-4D, Magnesium, **salts** 7439-96-5D,
 Manganese, **salts** 7440-09-7D, Potassium, **salts**
 7440-23-5D, Sodium, **salts** 7440-24-6D, Strontium, **salts**
 7440-39-3D, Barium, **salts** 7440-48-4D, Cobalt, **salts**
 7440-50-8D, Copper, **salts** 7440-66-6, Zinc, biological studies
 7440-70-2D, Calcium, **salts** 7575-35-1, N,N-Bis(2-hydroxyethyl)-
 p-phenylenediamine 7749-47-5, 2-Amino-4-methoxy-6-methylpyrimidine

7768-28-7, 2-(2-Hydroxyethyl)phenol 10173-66-7 13754-19-3,
 4,5-Diaminopyrimidine 14268-66-7, 3,4-Methylenedioxyaniline
 15477-76-6D, Phosphonate, **salts** 16082-33-0,
 3,5-Diaminopyrazole 16859-86-2, 1,4-Dimethylquinoliniumiodide
 16867-03-1, 2-Amino-3-hydroxy-pyridine 19335-11-6, 5-Aminoindazole
 20103-09-7, 1,4-Benzenediamine, 2,5-dichloro- 22715-34-0,
 2-Hydroxy-4,5,6-triaminopyrimidine 23244-87-3, 2,4,5-Triaminopyridine
 23894-07-7, 3,6-Dihydroxy-2,7-naphthalene disulfonic acid 24119-24-2,
 N,N-Bis-[2-(4-aminophenoxy)ethyl]methylaniline-trihydrochloride
 24905-87-1, HC Red 7 28020-38-4, 2,3-Diamino-6-methoxy-pyridine
 29539-03-5, 5,6-Dihydroxyindoline 31835-64-0, 3-Amino-3'-nitrobiphenyl
 34572-45-7, 2-Nitro-1-amino-4-[bis(2-hydroxyethyl)amino]benzene
 42952-29-4, 1-Ethyl-2-methylnaphtho[1,2-d]thiazolium-p-toluenesulfonate
 50610-28-1, 2-Chloro-5-nitro-N-hydroxyethyl-1,4-phenylenediamine
 51387-92-9 55302-96-0, 2-Methyl-5-(2-hydroxyethylamino)phenol
 56932-44-6, HC Yellow 5 58480-17-4, 1,2-Dimethylnaphtho[1,2-d]thiazolium-
 p-toluene sulfonate 61224-35-9, 1,2,3,3-Tetramethyl-3H-indolium-p-
 toluenesulfonate 61693-42-3, 3-Amino-2,4-dichlorophenol 62496-02-0,
 2-Methylamino-4,5,6-triaminopyrimidine 64993-07-3, 5-Amino-6-nitrobenzo-
 1,3-dioxole 66635-40-3, 4,4'-Diaminostilbene-dihydrochloride
 69825-83-8, 6-Nitro-2,5-diaminopyridine 70643-19-5, 3-Amino-4-(2'-
 hydroxyethyloxy)aniline 74918-21-1, 1,3-Bis(2,4-diaminophenoxy)propane-
 tetrahydrochloride 79352-72-0, 4-Amino-2-aminomethylphenol 80437-28-1
 82576-75-8, HC Violet 1 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
 84540-50-1, 6-Methyl-3-amino-2-chlorophenol 85679-78-3,
 3,5-Diamino-2,6-dimethoxy-pyridine 85926-99-4, 4-Hydroxyindoline
 90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine 93841-24-8,
 2-(2,5-Diaminophenyl)ethanol 93923-57-0 95576-89-9, HC Red 10
 99803-02-8 104333-09-7, 2-Hydroxymethyl-4-aminophenol 110102-86-8,
 2-Methyl-5-amino-4-chlorophenol 110952-48-2 114402-54-9,
 1,3-Bis(4-aminophenylamino)propane 115423-86-4, 1,3-Diamino-2,4-
 dimethoxybenzene 117907-43-4 128709-79-5 128729-30-6,
 1,3-Bis[N-(4-aminophenyl)-2-hydroxyethylamino]-2-propanol 130582-56-8,
 1,3-Bis(4-aminophenylamino)-2-propanol 136696-43-0 137290-86-9,
 5-(2-Hydroxyethylamino)-4-methoxy-2-methylphenol 144644-13-3,
 1,8-Bis(2,5-diaminophenoxy)-3,6-dioxaoctane-tetrahydrochloride
 159661-42-4, 2,5-Dihydroxy-4-morpholinoaniline 202525-71-1,
 2,5-Dihydroxy-4-morpholinoaniline-dihydrobromide 202525-73-3,
 2,4,5-Triaminophenol-trihydrochloride 202525-74-4,
 Pentaaminobenzenepentahydrochloride 202525-75-5, Hexaaminobenzene-
 hexahydrochloride 202525-76-6, 2,4,6-Triaminoresorcin trihydrochloride
 202525-78-8, 4,6-Diaminopyrogallol-dihydrochloride 215377-52-9,
 3,4-Methylenediaminoaniline 220118-56-9, 1,2,3,3-Tetramethyl-3H-indolium-
 methanesulfonate 223383-77-5, 4-Amino-3-hydroxynaphthalene-sulfonic acid
 260981-02-0, N-(2-Methoxyethyl)-p-phenylenediamine 260981-03-1,
 2,3-Dichloro-p-phenylenediamine 262853-93-0, Piperidine-3-carboxylic
 acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(**hair** dyes containing derivs. of **quaternized**
 heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT 346593-13-3 374675-92-0 374675-93-1 374675-94-2 374675-95-3
 374675-96-4 374675-97-5 374675-98-6 374675-99-7 374676-00-3
 374676-01-4 374676-02-5 374676-03-6 374676-04-7

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(**hair** dyes containing derivs. of **quaternized**
 heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

IT 374675-90-8P 374675-91-9P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (hair dyes containing derivs. of **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)
 IT 66-27-3, Methanesulfonic acid methylester 3012-80-4,
 1-Methyl-2-formylbenzimidazole
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (hair dyes containing derivs. of **quaternized** heteroarom. aldehyde and/or a **quaternized** heteroarom. ketone)

L69 ANSWER 18 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:833598 HCAPLUS
 DN 135:362346
 TI Agent for coloring hair fibers and method for temporarily coloring hair fibers
 IN Sauter, Guido; Braun, Hans-Juergen; Reichlin, Nadia
 PA Wella Aktiengesellschaft, Germany
 SO PCT Int. Appl., 60 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001086057	A1	20011115	WO 2001-EP2685	20010309
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10022744	A1	20011122	DE 2000-10022744	20000510
BR 2001006333	A	20020326	BR 2001-6333	20010309
EP 1194633	A1	20020410	EP 2001-919377	20010309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003532743	T2	20031105	JP 2001-582636	20010309
US 2002172651	A1	20021121	US 2001-19421	20011221
US 6669739	B2	20031230		
PRAI DE 2000-10022744	A	20000510		
WO 2001-EP2685	W	20010309		

OS MARPAT 135:362346

AB The invention relates to an agent with improved storage stability for coloring hair fibers yellow, brown, green, and violet shades, which is prepared before use by mixing an acidic component (A1), which contains ≥ 1 R1R2NCHR3:CHR4 or R1R2N+:CR3CH2R4 A- (R1-3 = organic group, R1 may for ring with R3 and N, R4 = H or C1-4 alkyl, A = anion) with a component (A2), which contains RHC:NR1 (R = aromatic or heteroarom group, R1 = organic group). The invention also relates to a method for temporarily coloring hair fibers according to which the coloring obtained by using said coloring agent is removed at any time by means of a decolorizing agent that contains sulfite.

IC ICM D06P003-04
 ICS A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST hair dye enamine Schiff base **combination**

IT Enamines
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (**combinations** of enamines and Schiff bases for temporarily coloring of hair fibers)

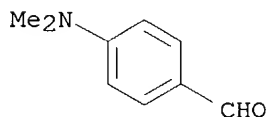
IT Schiff bases
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
 (**combinations** of enamines and Schiff bases for temporarily coloring of hair fibers)

IT Hair preparations
 (dyes; **combinations** of enamines and Schiff bases for temporarily coloring of hair fibers)

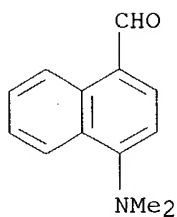
IT 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 1952-38-1,
 2-[[(2-Hydroxyethyl)imino]methyl]phenol 6872-05-5, 5-Amino-1,3,3-trimethyl-2-methyleneindoline 6872-17-9, 5-Chloro-1,3,3-trimethyl-2-methyleneindoline 25082-84-2 27344-28-1, 6-Hydroxy-1,3,3-trimethyl-2-methyleneindoline 27344-29-2, 3,3-Dimethyl-1-(2-Hydroxyethyl)-2-methyleneindoline 35976-46-6, 5-Methoxy-1,3,3-trimethyl-2-methyleneindoline 36429-28-4, 5-Hydroxy-1,3,3-trimethyl-2-methyleneindoline 39578-87-5, 1,3,3,5-Tetramethyl-2-methyleneindoline 41382-29-0, 5-N-Acetyl-amino-1,3,3-trimethyl-2-methyleneindoline 120420-70-4, 1,3,3,7-Tetramethyl-2-methyleneindoline 126526-42-9, 5,6-Dimethoxy-1,3,3-trimethyl-2-methyleneindoline 151249-39-7, 5-Fluoro-1,3,3-trimethyl-2-methyleneindoline 189685-50-5, 1,3,3,5,7-Pentamethyl-2-methyleneindoline 344928-74-1, 1,3,3-Trimethyl-2-methylene-3H-benz[e]indoline 357397-32-1, 1,3,3,4-Tetramethyl-2-methyleneindoline 357397-33-2, 1,3,3,6-Tetramethyl-2-methyleneindoline 357397-34-3, 1,3,3,6,7-Pentamethyl-2-methyleneindoline 357397-35-4, 1,3,3,4,7-Pentamethyl-2-methyleneindoline 357397-36-5, 5-Isopropyl-1,3,3-trimethyl-2-methyleneindoline 357397-37-6, 6-Methoxy-1,3,3-trimethyl-2-methyleneindoline 357397-39-8, 5-Methoxy-6-amino-1,3,3-trimethyl-2-methyleneindoline 357397-41-2, 6-N-Acetyl-amino-5-methoxy-1,3,3-trimethyl-2-methyleneindoline 357397-42-3, 5,6-Dihydroxy-1,3,3-trimethyl-2-methyleneindoline 357397-44-5, 4,5-Dihydroxy-1,3,3-trimethyl-2-methyleneindoline 357397-45-6, 5,7-Dihydroxy-1,3,3-trimethyl-2-methyleneindoline 357397-46-7, 5-Amino-7-hydroxy-1,3,3-trimethyl-2-methyleneindoline 357397-47-8, 7-N-Acetyl-amino-5-hydroxy-1,3,3-trimethyl-2-methyleneindoline 373390-40-0, 5-Amino-6-methoxy-1,3,3-trimethyl-2-methyleneindoline 373390-41-1, 7-Amino-5-hydroxy-1,3,3-trimethyl-2-methyleneindoline 373390-42-2, (S)-2-[(3,5-Dimethoxy-4-hydroxybenzylidene)amino]-5-guanidinopentanoic acid 373390-43-3, (S)-2-[(3,5-Dimethoxy-4-hydroxybenzylidene)amino]-3-(3H-imidazol-4-yl)propanoic acid 373390-44-4, (S)-2-[(4-Hydroxybenzylidene)amino]-3-(3H-imidazol-4-yl)propanoic acid 373390-45-5, (S)-2-[(3,5-Dimethoxy-4-hydroxybenzylidene)amino]-3-(1H-indol-3-yl)propanoic acid 373390-46-6, (S)-2-[(4-Hydroxybenzylidene)amino]-3-(1H-indol-3-yl)propanoic acid 373390-47-7, 4-[[(2-Hydroxyethyl)imino]methyl]-1,2,3-trihydroxybenzene 373390-48-8, 5-[[(2-Hydroxyethyl)imino]methyl]-1,2,3,4-tetrahydroxybenzene
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**combinations** of enamines and Schiff bases for temporarily coloring of hair fibers)

IT 1952-37-0P, 4-[[(2-Hydroxyethyl)imino]methyl]phenol 17065-03-1P,

4-[[(2-Hydroxyphenyl) imino] methyl] phenol 27976-81-4P,
 N,N-Dimethyl-4-[[(2-hydroxyethyl) imino] methyl] aniline 64073-92-3P,
 2,6-Dimethoxy-4-[[(2-hydroxyphenyl) imino] methyl] phenol 70365-18-3P,
 4-[[(2-Hydroxyethyl) imino] methyl]-2-methoxyphenol 373390-26-2P,
 5-[[(2-Hydroxyethyl) imino] methyl]-2-methoxyphenol 373390-27-3P,
 2,6-Dimethoxy-4-[[(2-hydroxyethyl) imino] methyl]-2-methoxyphenol
 373390-28-4P, 1,2-Dihydroxy-4-[[(2-hydroxyethyl) imino] methyl] benzene
 373390-29-5P, 1,2-Dihydroxy-3-[[(2-hydroxyethyl) imino] methyl] benzene
 373390-30-8P, 4-[[(3-Hydroxypropyl) imino] methyl] phenol 373390-31-9P,
 2,6-Dimethoxy-4-[[(3-hydroxypropyl) imino] methyl] phenol 373390-32-0P,
 4-[[(2,3-Dihydroxypropyl) imino] methyl] phenol 373390-33-1P,
 4-[[(2,3-Dihydroxypropyl) imino] methyl]-2,6-dimethoxyphenol 373390-34-2P
 373390-35-3P 373390-36-4P, 4-[[(2-Hydroxy-2-
 phenylethyl) imino] methyl] phenol 373390-37-5P, (R)-2,6-Dimethoxy-4-[[(2-
 hydroxy-1-phenylethyl) imino] methyl] phenol 373390-38-6P,
 (S)-5-Guanidino-2-[[(4-hydroxybenzyliden) amino] pentanoic acid
 373390-39-7P, 2-[[(4-Dimethylaminonaphthalen-1-ylmethylene) amino] ethanol
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); PRP
 (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (combinations of enamines and Schiff bases for temporarily
 coloring of hair fibers)
 IT 59223-23-3, 5-Hydroxy-1,2,3,3-tetramethyl-3H-indolium iodide 62439-66-1,
 1,2,3,3-Tetramethyl-3H-indolium chloride 274696-30-9,
 1,2,3,3-Tetramethyl-3H-indolium hydrogen sulfate
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
 study); USES (Uses)
 (combinations of enamines and Schiff bases for temporarily
 coloring of hair fibers)
 IT 74-79-3, L-Arginine, reactions 95-55-6, 2-Aminophenol 100-10-7
 , 4-(Dimethylamino)benzaldehyde 121-33-5, 4-Hydroxy-3-
 methoxybenzaldehyde 123-08-0, 4-Hydroxybenzaldehyde 134-96-3,
 3,5-Dimethoxy-4-hydroxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde
 141-43-5, Ethanolamine, reactions 156-87-6, 3-Amino-1-propanol
 534-03-2, 2-Amino-1,3-propanediol 616-30-8, 3-Amino-1,2-propanediol
 621-59-0, 3-Hydroxy-4-methoxybenzaldehyde 1971-81-9,
 4-(Dimethylamino)naphthalene-1-carboxaldehyde 7568-93-6,
 2-Amino-1-phenylethanol 24677-78-9, 2,3-Dihydroxybenzaldehyde
 56613-80-0, (R)-2-Amino-2-phenylethanol
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (precursor; combinations of enamines and Schiff bases for
 temporarily coloring of hair fibers)
 IT 100-10-7, 4-(Dimethylamino)benzaldehyde 1971-81-9,
 4-(Dimethylamino)naphthalene-1-carboxaldehyde
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (precursor; combinations of enamines and Schiff bases for
 temporarily coloring of hair fibers)
 RN 100-10-7 HCAPLUS
 CN Benzaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RN 1971-81-9 HCAPLUS
 CN 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 19 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:635862 HCAPLUS
DN 135:215740
TI Hair dye kits comprising indoline/indolium derivatives, carbonyl compounds
and a decolorizing agent
IN Sauter, Guido; Braun, Hans-Juergen; Reichlin, Nadia
PA Wella Aktiengesellschaft, Germany
SO PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001062219	A1	20010830	WO 2001-EP821	20010125
	W:				
	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,				
	ES, FI, GB, GE, HU, IN, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,				
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	SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ZA, AM, AZ,				
	BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10007948	A1	20010906	DE 2000-10007948	20000222
	AU 2001028495	A5	20010903	AU 2001-28495	20010125
	BR 2001004590	A	20020108	BR 2001-4590	20010125
	EP 1227786	A1	20020807	EP 2001-949088	20010125
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003523375	T2	20030805	JP 2001-561286	20010125
	US 2003079301	A1	20030501	US 2001-959112	20011017
	US 6652601	B2	20031125		
PRAI	DE 2000-10007948	A	20000222		
	WO 2001-EP821	W	20010125		
OS	MARPAT 135:215740				
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